

Mr. Virgil Miller
Newmar Corporation
P.O. Box 30
Nappanee, Indiana 46550-0030

Re: 039-15355
Second Significant Permit Modification to
Part 70 No.: T 039-7571-00157

Dear Mr. Miller:

Newmar Corporation was issued a permit on October 18, 1999, for a stationary motor home and travel trailer manufacturing. A letter requesting changes to this permit was received on September 25, 2001 and a request for additional changes was received on January 7, 2002. Pursuant to the provisions of 326 IAC 2-7-12 a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of an increase in the allowable VOC emissions from the two (2) spray coating booths, identified as BR-1 and BR-2. Due to this increase, the existing VOC emission limit for the two (2) booths of less than 25 tons per year was removed and the modification was reviewed under the requirements of 326 IAC 8-1-6 (New Facilities, General Reduction Requirements). Also, spray booth B-2 will now be included in the facility identified as EU-01 (Hardwoods). This previously permitted booth was taken out of service prior to issuance of the Part 70 permit and was therefore not included in the Part 70 permit. However, the source is now requesting that this booth be put back into operation and used to coat interior wood components along with the existing booth B-1. The potential emissions of VOC from EU-01 would remain unchanged. As the existing booth B-1 is subject to the requirements of 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating) and the requirements of 40 CFR 63.802, Subpart JJ, National Emission Standards for Wood Furniture Manufacturing Operations, the booth B-2 would now also be subject to the requirements of those rules.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5.
If you have any questions on this matter, please contact Trish Earls, c/o OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call at (973) 575-2555, ext. 3219 or dial (800) 451-6027, press 0 and ask for extension 3-6878.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
TE/EVP

cc: File - Elkhart County
U.S. EPA, Region V
Elkhart County Health Department
Northern Regional Office
Air Compliance Section Inspector - Paul Karkiewicz
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michelle Boner

PART 70 OPERATING PERMIT

OFFICE OF AIR QUALITY

**Newmar Corporation
355 North Delaware Street
Nappanee, Indiana 46550-0030**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T039-7571-00157	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: October 18, 1999

First Administrative Amendment 039-11533 issued on December 17, 1999

First Significant Source Modification 039-11239, issued on December 28, 1999

Second Significant Source Modification No.: 039-12223, issued on August 1, 2000

Second Administrative Amendment 039-12485 issued on September 18, 2000

First Significant Permit Modification No.: 039-12798, issued February 6, 2001

Second Significant Permit Modification 039-15355	Pages Affected: 3-8, 29-38, 41, 46, 48-50, 59, 60 Pages Added: 55b, 55c
Issued by: Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: March 13, 2002

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

- C.11 Compliance Schedule [326 IAC 2-7-6(3)]
- C.12 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
- C.13 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]
- C.14 Monitoring Methods [326 IAC 3]
- C.15 Pressure Gauge Specifications

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

- C.16 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
- C.17 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]
- C.18 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5]
- C.19 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- C.20 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)]
- C.21 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]
- C.22 General Record Keeping Requirements [326 IAC 2-7-5(3)]
- C.23 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

Stratospheric Ozone Protection

- C.24 Compliance with 40 CFR 82 and 326 IAC 22-1

D.1 FACILITY OPERATION CONDITIONS

One Spray Paint Booth (B-1) and One Dip Tank (EU-01)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-12] [326 IAC 2-2]
- D.1.2 General Provisions Relating to HAPs [326 IAC 20-1-1] [40 CFR 63, Subpart A]
- D.1.3 Volatile Hazardous Air Pollutant (VHAP) [326 IAC 14][40 CFR Part 63.802] [40 CFR Subpart JJ]
- D.1.4 Particulate Matter (PM) [326 IAC 6-3-2(c)]
- D.1.5 Work Practice Standards [326 IAC 14] [40 CFR Part 63.803]
- D.1.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.1.7 Performance Test Methods [326 IAC 14] [40 CFR Part 63.805]
- D.1.8 VOC Emissions

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.1.9 Particulate Matter (PM)
- D.1.10 Training Requirements
- D.1.11 Compliance Procedures and Monitoring Requirements [326 IAC 14] [40 CFR Part 63.804]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.1.12 Record Keeping Requirements [326 IAC 14] [40 CFR Part 63.806]
- D.1.13 Reporting Requirements [326 IAC 14] [40 CFR Part 63.807]

D.2 FACILITY OPERATION CONDITIONS

Two (2) Paint Booths (B-2a and B-2b)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.2.1 BACT Determination [326 IAC 8-1-6]
- D.2.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]
- D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.2.4 Testing Requirements [326 IAC 8-1-4]
- D.2.5 VOC Emissions

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.2.6 Particulate Matter (PM)
- D.2.7 Training Requirements

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.2.8 Record Keeping Requirements
- D.2.9 Reporting Requirements

D.3 FACILITY OPERATION CONDITIONS

One (1) Spray Paint Booth (B-3)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.3.1 Volatile Organic Compounds (Miscellaneous Metal Coatings) [326 IAC 8-2-9] [326 IAC 2-2]
- D.3.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]
- D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.3.4 Volatile Organic Compounds
- D.3.5 VOC Emissions

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.3.6 Particulate Matter (PM)
- D.3.7 Training Requirements

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.3.8 Record Keeping Requirements
- D.3.9 Reporting Requirements

D.4 FACILITY OPERATION CONDITIONS

One (1) Spray Paint Booth (B-4)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.4.1 Volatile Organic Compounds [326 IAC 8-1-6] [326 IAC 8-2-12]
- D.4.2 BACT Minor Limit [326 IAC 8-1-6]
- D.4.3 Particulate Matter (PM) [326 IAC 6-3-2(c)]
- D.4.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.4.5 Testing Requirements [326 IAC 2-7-6(1),(6)]

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.4.6 Particulate Matter (PM)
- D.4.7 Training Requirements

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.4.8 Record Keeping Requirements

D.5 FACILITY OPERATION CONDITIONS

One (1) FRP Booth (EU-05)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.5.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]
- D.5.2 Volatile Organic Compound (VOC)

Compliance Determination Requirements

- D.5.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.5.4 Particulate Matter (PM)
- D.5.5 Training Requirements

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.5.6 Record Keeping Requirements
- D.5.7 Reporting Requirements

D.6 FACILITY OPERATION CONDITIONS

One (1) Spray Paint Booth (R & D) and Two (2) Paint Booths (BR-1 and BR-2)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.6.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]
- D.6.2 Volatile Organic Compound (VOC)
- D.6.3 Particulate Matter (PM) [326 IAC 6-3-2(c)]
- D.6.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.6.5 Volatile Organic Compounds (VOC)
- D.6.6 VOC Emissions

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.6.7 Particulate Matter (PM)
- D.6.8 Training Requirements

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.6.9 Record Keeping Requirements
- D.6.10 Reporting Requirements

D.7 FACILITY OPERATION CONDITIONS

Woodworking operations

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.7.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]
- D.7.2 Preventive Maintenance Plan [326 IAC 2-7-4(c)(9)]

Compliance Determination Requirements

- D.7.3 Testing Requirements [326 IAC 2-7-6(1),(6)]
- D.7.4 Particulate Matter (PM)

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.7.5 Parametric Monitoring
- D.7.6 Broken Bag or Failure Detection

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.7.7 Record Keeping Requirements

**D.8 FACILITY OPERATION CONDITIONS - Insignificant Activities -
Welding and Degreasing Operations**

D.9 FACILITY OPERATION CONDITIONS

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.9.1 Particulate Matter (PM) [326 IAC 6-3]

D.9.2 Particulate Matter (PM) [326 IAC 6-3]

D.9.3 Miscellaneous Metal Coating Operations [326 IAC 8-2-9]

Compliance Determination Requirements

D.9.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

**D.10 FACILITY OPERATION CONDITIONS
One (1) Undercoating spray booth (EU-08)**

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.10.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]

D.10.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

Compliance Determination Requirements

D.10.3 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

D.10.4 Volatile Organic Compounds (VOC)

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.10.5 Record Keeping Requirements

Certification

Emergency/Deviation Occurrence Report

Quarterly Report (Entire Source)

Semi-Annual Report

Quarterly Compliance Monitoring Report

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary motor home and travel trailer manufacturing facility.

Responsible Official: Mr. Virgil Miller
Source Address: 355 North Delaware Street, Nappanee, Indiana 46550-0030
Mailing Address: P.O. Box 30, Nappanee, Indiana 46550-0030
SIC Code: 3716 and 3792
County Location: Elkhart
County Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program
Major Source under PSD;
Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- a) EU-01 (Hardwoods)
 - One (1) Spray Paint Booth B-1, equipped with six (6) high volume low pressure (HVL) spray guns, and one (1) Spray Paint Booth B-2, equipped with six (6) HVL spray guns, for coating of interior wood components with a maximum capacity of four (4) recreational vehicles per hour, each with dry filters for the particulate matter overspray control, and booth B-1 exhausting to stacks SV1-1 and SV1-2 and booth B-2 exhausting to stack SV-91. (1982)
 - One (1) Dip Tank, with a capacity of four (4) units per hour, exhausting to general ventilation. (1982)
- b) EU-02 (Custom Coating)
 - Two (2) high volume low pressure (HVL) spray applications for coating recreational vehicles/motor homes in each downdraft paint booth identified as B-2a and B-2b, each with a maximum capacity of one (1) recreational vehicle per hour, dry filters for the particulate matter overspray control, each booth exhausting to two separate stacks identified as SV2-3a, SV2-3b and SV2-4a, SV2-4b respectively. (1998)
- c) EU-03 (Frames), One (1) Spray Paint Booth B-3, equipped with two (2) high volume low pressure (HVL) spray application for coating metal frames, with a maximum capacity of four (4) frames per hour, using dry filters as particulate matter overspray control, and exhausting to stack SV-3. (1990)
- d) EU-04 (Adhesives), One (1) Spray Paint Booth B-4, equipped with two (2) HVL spray guns, with a maximum capacity of four (4) units per hour, using dry filters as control, and exhausting to stacks SV4-1 and SV4-2. (1983)

- e) EU-05 (FRP), One (1) FRP Booth (seam work on special orders), equipped with three (3) high volume low pressure (HVLP) spray and hand lay up application for coating fiberglass touch up and repair operation, with a maximum capacity of 0.12 units per hour, using dry filters for particulate matter overspray control, and exhausting to stack SV-5. (1995)
- f) EU-06 (R&D, Service & Warranty)
 - One (1) spray paint booth (R & D), equipped with one (1) air atomized spray gun for fiberglass mold coating, with a production rate of 0.0031 unit per hour, located at Research and Development Center. (1996)
 - Two (2) spray coating booths, identified as BR-1 and BR-2, equipped with HVLP spray guns, using dry filters for overspray control, and each exhausting at two (2) stacks, identified as SV6-1A and SV6-1B and SV6-2A and SV6-2B, respectively. (1998)
- g) EU-07 (Woodworking)
 - One (1) woodworking shop equipped with woodworking equipment, located in Building 3, using one (1) baghouse as control and exhausting internally, located at North Delaware Street. (1981)
 - One (1) woodworking shop equipped with woodworking equipment, with a wood usage of 61 pounds per hour, attached to a portable dust collector as particulate control, exhausted internally, located at Research and Development Center. (1996)
 - One (1) woodworking and machining shop equipped with woodworking and metalworking equipment, with one table saw attached to a portable dust collector as particulate control, exhausted internally, with a maximum capacity of sixty (60) pounds per hour wood, ten (10) pounds per hour plastic and fiberglass, and twelve (12) pounds per hour steel processing capacity, located at Service and Repair Center. (1998)
- h) Four (4) natural gas based Unit Heaters identified as H-1, H-2, H-3 and H-4 each having heat input rate of 0.25 million BTU/hour;
- i) One (1) diesel engine Test Cell with a capacity of 260 horsepower;
- j) One (1) metal inert gas welding process with 9 welding stations with 1.05 lbs/hour rate of consumption of wire per station;
- k) One (1) water based frame paint booth with rate of production as 0.1 unit per hour; and
- l) One (1) undercoating booth, identified as EU-08, using an airless spray application system, coating a maximum of 2.5 wood and metal chassis per hour, exhausting to the general ventilation.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- a) Welding operations
- b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

EU-01 (Hardwoods), One (1) Spray Paint Booth B-1, equipped with six (6) high volume low pressure (HVLP) spray guns, and one (1) Spray Paint Booth B-2, equipped with six (6) HVLP spray guns, for coating of interior wood components with a maximum capacity of four (4) recreational vehicles per hour, each with dry filters for the particulate matter overspray control, and booth B-1 exhausting to stacks SV1-1 and SV1-2 and booth B-2 exhausting to stack SV-91. (1982)

One (1) Dip Tank B-1 with a capacity of four (4) units per hour, exhausting to general ventilation. (1982)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Volatile Organic Compounds (Wood Furniture and Cabinet Coating) [326 IAC 8-2-12] [326 IAC 2-2]

- (a) Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coatings applied to wood furniture and/or wood components in paint areas identified as B-1 and B-2, shall utilize one or more of the following application methods:

Airless Spray Application	Air-Assisted Airless Spray Application
Electrostatic Spray Application	Electrostatic Bell or Disc Application
Heated Airless Spray Application	Roller Coating
Brush or Wipe Application	Dip-and-Drain Application
High Volume Low Pressure HVLP	Aerosol Spray Cans

- (b) High volume low pressure spray is an acceptable alternative application of air-assisted airless spray. High volume low pressure (HVLP) spray means technology used to apply coating to a substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.
- (c) The input VOC to the paint areas B-1 and B-2 and the usage of cleanup solvent for the paint areas B-1 and B-2 (the usage of cleanup solvent may need to take into account any recycling of cleanup rags or reused solvent), in combination with input VOC from Spray Paint Booth B-3, FRP Booth, the undercoating spray booth, and insignificant activities, shall be limited to less than 156 tons per 12 consecutive month period. This limitation will make 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

D.1.2 General Provisions Relating to HAPs [326 IAC 20-1-1] [40 CFR 63, Subpart A]

The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63 Subpart JJ.

D.1.3 Volatile Hazardous Air Pollutant (VHAP) [326 IAC 14] [40 CFR Part 63.802] [40 CFR Subpart JJ]

Pursuant to 40 CFR 63, Subpart JJ (National Emission Standards for Wood Furniture Manufacturing Operations):

- (a) The volatile organic hazardous air pollutant (VHAP) emissions from wood kitchen cabinet surface coating operations in the paint areas identified as B-1 and B-2 shall be limited to:

Coatings	Limit (lb. of VHAP / lb. of solid applied)
weighted average VHAP content all coatings	0.8
stains	1.0
wash coats, sealers, topcoats, base coats, and enamels	0.8
thinners used for on-site formulation of washcoats, basecoats, and enamels (maximum % allowable)	3.0
all other thinners (maximum % allowable)	10.0
strippable spray booth material (maximum VOC content, lbs VOC/lb Solids)	0.80
contact adhesive (excluding aerosol adhesive and contact adhesive applied to nonporous substrates)	0.2

Where VHAP is defined as any hazardous air pollutant listed in Table 2 Subpart JJ.

- (b) The wood furniture coating operation is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP), 326 IAC 20-14, (40 CFR 63, Subpart JJ), with a compliance date of upon startup.

D.1.4 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitations), the PM from each of the spray areas B-1 and B-2 shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.5 Work Practice Standards [326 IAC 14] [40 CFR Part 63.803]

Pursuant 326 IAC 14 & 40 CFR 63, Subpart JJ (National Emission Standards for Wood Furniture Manufacturing Operations):

- (a) The owner or operator of the spray paint areas B-1 and B-2 subject to this subpart shall prepare and maintain a written work practice implementation plan that defines environmentally desirable work practices for each wood furniture manufacturing operation and addresses each of the work practice standards presented in paragraphs (b) through (l) of this section. The plan shall be developed no more than 60 days after the issuance date of this permit. The written work practice implementation plan shall be available for inspection by the EPA and IDEM upon request. If the EPA and IDEM determines that the work practice implementation plan does not adequately address each of the topics specified in paragraphs (b) through (l) of this section or that the plan does not include sufficient mechanisms for ensuring that the work practice standards are being implemented, the EPA and IDEM may require the affected source to modify the plan. Revisions or modifications to the plan do not require a revision of the source's Title V permit.

- (b) The owner or operator of the spray paint areas B-1 and B-2 shall train all new and existing personnel, including contract personnel, who are involved in finishing, gluing, cleaning, and washoff operations, use of manufacturing equipment, or implementation of the requirements of this subpart. All new personnel, those hired after the compliance date of the standard, shall be trained upon hiring. All existing personnel, those hired before the compliance date of the standard, shall be trained within six months of the compliance date of the standard. All personnel shall be given refresher training annually. The owner or operator of the spray paint areas B-1 and B-2 shall maintain a copy of the training program with the work practice implementation plan. The training program shall include, at a minimum, the following:
 - (1) A list of all current personnel by name and job description that are required to be trained;
 - (2) An outline of the subjects to be covered in the initial and refresher training for each position or group of personnel;
 - (3) Lesson plans for courses to be given at the initial and the annual refresher training that include, at a minimum, appropriate application techniques, appropriate cleaning and washoff procedures, appropriate equipment setup and adjustment to minimize finishing material usage and overspray, and appropriate management of cleanup wastes; and
 - (4) A description of the methods to be used at the completion of initial or refresher training to demonstrate and document successful completion.
- (c) The owner or operator of the spray paint areas B-1 and B-2 shall prepare and maintain with the work practice implementation plan a written leak inspection and maintenance plan that specifies:
 - (1) A minimum visual inspection frequency of once per month or all equipment used to transfer or apply coatings, adhesives, or organic solvents;
 - (2) An inspection schedule;
 - (3) Methods for documenting the date and results of each inspection and any repairs that were made;
 - (4) The time frame between identifying the leak and making the repair, which adheres, at a minimum, to the following schedule:
 - (i) A first attempt at repair (e.g., tightening of packing glands) shall be made no later than five calendar days after the leak is detected; and
 - (ii) Final repairs shall be made within 15 calendar days after the leak is detected, unless the leaking equipment is to be replaced by a new purchase, in which case repairs shall be completed within three months.
- (d) The owner or operator of the spray paint areas B-1 and B-2 shall develop an organic solvent accounting form to record:
 - (1) The quantity and type of organic solvent used each month for washoff and cleaning, as defined in § 63.801 of this subpart;
 - (2) The number of pieces washed off, and the reason for the washoff; and

- (3) The quantity of spent solvent generated from each washoff and cleaning operation each month, and whether it is recycled onsite or disposed offsite.
- (e) The owner or operator of the spray paint areas B-1 and B-2 shall not use cleaning or washoff solvents that contain any of the pollutants listed in Table 4 to this subpart, in concentrations subject to MSDS reporting as required by OSHA.
- (f) The owner or operator of the spray paint areas B-1 and B-2 shall not use compounds containing more than 8.0 percent by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters, unless the spray booth is being refurbished. If the spray booth is being refurbished, that is the spray booth coating or other protective material used to cover the booth is being replaced, the spray paint booths B-1 and B-2 shall use no more than 1.0 gallon of organic solvent per booth to prepare the surface of the booth prior to applying the booth coating.
- (g) The owner or operator of the spray paint areas B-1 and B-2 shall use normally closed containers for storing finishing, gluing, cleaning, and washoff materials.
- (h) The owner or operator of the spray paint areas B-1 and B-2 shall use conventional air spray guns to apply finishing materials only under any of the following circumstances:
 - (1) To apply finishing materials that have a VOC content no greater than 1.0 lb VOC/lb solids, as applied;
 - (2) For touch up and repair under the following conditions:
 - (i) The touch up and repair occurs after completion of the finishing operation; or
 - (ii) The touch up and repair occurs after the application of stain and before the application of any other type of finishing material, and the materials used for touch up and repair are applied from a container that has a volume of no more than 2.0 gallons.
 - (3) When spray is automated, that is, the spray gun is aimed and triggered automatically, not manually;
 - (4) When emissions from the finishing application station are directed to a control device;
 - (5) The conventional air gun is used to apply finishing materials and the cumulative total usage of that finishing material is no more than 5.0 percent of the total gallons of finishing material used during that semiannual period; or
 - (6) The conventional air gun is used to apply stain on a part for which it is technically or economically infeasible to use any other spray application technology. The owner or operator of the spray paint areas B-1 and B-2 shall demonstrate technical or economic infeasibility by submitting to the EPA and IDEM a videotape, a technical report, or other documentation that supports the facility's claim of technical or economic infeasibility. The following criteria shall be used, either independently or in combination, to support the owner or operator of spray paint area B-1 or B-2's claim of technical or economic infeasibility:
 - (i) The production speed is too high or the part shape is too complex for one operator to coat the part and the application station is not large enough to accommodate an additional operator; or

- (ii) The excessively large vertical spray area of the part makes it difficult to avoid sagging or runs in the stain.
- (i) The owner or operator of the spray paint areas B-1 and B-2 shall pump or drain all organic solvent used for line cleaning into a normally closed container.
- (j) The owner or operator of the spray paint areas B-1 and B-2 shall collect all organic solvent used to clean spray guns into a normally closed container.
- (k) The owner or operator of the spray paint areas B-1 and B-2 shall control emissions from washoff operations by:
 - (1) Using normally closed tanks for washoff; and
 - (2) Minimizing dripping by tilting or rotating the part to drain as much solvent as possible.
- (l) The owner or operator of the spray paint areas B-1 and B-2 shall prepare and maintain with the work practice implementation plan a formulation assessment plan that:
 - (1) Identifies VHAP from the list presented in Table 5 of the 40 CFR 63 Part JJ that are being used in finishing operations by the facility;
 - (2) Establishes a baseline level of usage by the spray paint areas B-1 and B-2, for each VHAP identified in paragraph (l)(1) of this section. The baseline usage level shall be the highest annual usage from 1994, 1995, or 1996, for each VHAP identified in paragraph (l)(1) of this section. For formaldehyde, the baseline level of usage shall be based on the amount of free formaldehyde present in the finishing material when it is applied. For styrene, the baseline level of usage shall be an estimate of unreacted styrene, which shall be calculated by multiplying the amount of styrene monomer in the finishing material, when it is applied, by a factor of 0.16. Sources using a control device to reduce emissions may adjust their usage based on the overall control efficiency of the control system, which is determined using the equation in § 63.805 (d) or (e).
 - (3) Tracks the annual usage of each VHAP identified in (l)(1) by the paint areas that are present in amounts subject to MSDS reporting as required by OSHA.
 - (4) If, after November 1998, the annual usage of the VHAP identified in paragraph (l)(1) exceeds its baseline level, then the owner or operator of the spray paint areas B-1 and B-2 shall provide a written notification to the permitting authority that describes the amount of the increase and explains the reasons for exceedance of the baseline level. The following explanations would relieve the owner or operator from further action, unless the facility is not in compliance with any State regulations or requirements for that VHAP:
 - (i) The exceedance is no more than 15.0 percent above the baseline level;
 - (ii) Usage of the VHAP is below the de minimis level presented in Table 5 of 40 CFR 63 Part JJ subpart for that VHAP (sources using a control device to reduce emissions may adjust their usage based on the overall control efficiency of the control system, which is determined using the procedures in § 63.805 (d) or (e));
 - (iii) The spray paint areas B-1 and B-2 are in compliance with its State's air toxic regulations or guidelines for the VHAP; or

- (iv) The source of the pollutant is a finishing material with a VOC content of no more than 1.0 kg VOC/kg solids (1.0 lb VOC/lb solids), as applied.
- (5) If none of the above explanations are the reason for the increase, the owner or operator shall confer with the permitting authority to discuss the reason for the increase and whether there are practical and reasonable technology-based solutions for reducing the usage. The evaluation of whether a technology is reasonable and practical shall be based on cost, quality, and marketability of the product, whether the technology is being used successfully by other wood furniture manufacturing operations, or other criteria mutually agreed upon by the permitting authority and owner or operator. If there are no practical and reasonable solutions, the source need take no further action. If there are solutions, the owner or operator shall develop a plan to reduce usage of the pollutant to the extent feasible. The plan shall address the approach to be used to reduce emissions, a timetable for implementing the plan, and a schedule for submitting notification of progress.
- (6) If after November 1998, an affected source uses a VHAP of potential concern for which a baseline level has not been previously established, then the baseline level shall be established as the de minimis level, based on 70 year exposure levels and data provided in the proposed rulemaking pursuant to Section 112(g) of the CAA, for that pollutant. A list of VHAP of potential concern is provided in Table 6 of 40 CFR 63 Part JJ. If usage of the VHAP of potential concern exceeds the de minimis level, then the source shall provide an explanation to the permitting authority that documents the reason for exceedance of the de minimis level. If the explanation is not one of those listed in paragraphs (I)(4)(I) through (I)(4)(iv), the source shall follow the procedures established in (I)(5).

D.1.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

D.1.7 Performance Test Methods [326 IAC 14][40 CFR Part 63.805]

- (a) The EPA Method 311 of Appendix A of part 63 shall be used in conjunction with formulation data to determine the VHAP content of the liquid coating in the spray areas B-1 and B-2. Formulation data shall be used to identify VHAP present in the coating. The EPA Method 311 shall then be used to quantify those VHAP identified through formulation data. The EPA Method 311 shall not be used to quantify HAP such as styrene and formaldehyde that are emitted during the cure.
- (b) The EPA Method 24 (40 CFR part 60, Appendix A) shall be used to determine the solids content by weight and the density of coatings in the spray areas B-1 and B-2. If it is demonstrated to the satisfaction of the EPA and IDEM that a coating does not release VOC or HAP byproducts during the cure, for example, all VOC and HAP present in the coating is solvent, then batch formulation information shall be accepted.
- (c) The owner or operator of the spray areas B-1 and B-2 may request approval from the EPA and IDEM to use an alternative method for determining the VHAP content of the coating.

- (d) In the event of any inconsistency between the EPA Method 24 or Method 311 test data and the spray area B-1 or the spray area B-2 formulation data, that is, if the EPA Method 24/311 value is higher, the EPA Method 24/311 test shall govern unless after consultation, a regulated source could demonstrate to the satisfaction of the enforcement agency that the formulation data were correct. Sampling procedures shall follow the guidelines presented in "Standard Procedures for Collection of Coating and Ink Samples for VOC Content Analysis by Reference Method 24 and Reference Method 24A" EPA-340/1-91-010. (Docket No. A-93-10, Item No. IV-A-1).

D.1.8 VOC Emissions

Compliance with Condition D.1.1 shall be demonstrated at the end of each month based on the total volatile organic compound usage for the most recent twelve (12) month period.

Compliance Monitoring Requirements

D.1.9 Particulate Matter (PM)

The dry filters for particulate matter overspray control shall be properly in place and maintained to ensure integrity and particulate loading of the filters at all times when the paint booths are in operation.

D.1.10 Training Requirements

- (a) The Permittee shall implement an operator training program.
- (1) All operators that perform surface coating operations using spray equipment or booth maintenance shall be trained in the proper set-up and operation of the particulate control system. All existing operating shall be trained within 60 days of the date of permit issuance. All new operators shall be trained upon hiring or transfer.
- (2) Training shall include proper filter alignment, filter inspection and maintenance, and trouble shooting practices. The training program shall be written and retained on site. The training program shall include a description of the methods to be used at the completion of initial and refresher training to demonstrate and document successful completion. Copies of the training program, the list of trained operators and training records shall be maintained on site or available within 1 hour for inspection by IDEM.
- (3) All operators shall be given refresher training annually.
- (b) Additional inspection and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

D.1.11 Compliance Procedures and Monitoring Requirements [326 IAC 14] [40 CFR Part 63.804]

- (a) The owner or operator of the spray paint areas B-1 and B-2 shall comply with the Condition D.1.3 provisions by using the following methods:

Use compliant finishing materials according to the following criteria:

- (i) Demonstrate that each sealer and topcoat has a VHAP content of no more than 0.8 kg VHAP/kg solids (0.8 lb VHAP/lb solids), as applied, each stain has a VHAP content of no more than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied, and each thinner contains no more than 10.0 percent VHAP by weight;
- (ii) Demonstrate that each washcoat, base coat, and enamel that is purchased pre-made, that is, it is not formulated onsite by thinning another finishing material, has a VHAP content of no more than 0.8 kg VHAP/kg solids (0.8 lb VHAP/lb solids), as applied, and each thinner contains no more than 10.0 percent VHAP by weight; and

- (iii) Demonstrate that each wash coat, base coat, and enamel that is formulated onsite is formulated using a finishing material containing no more than 0.8 kg VHAP/kg solids (0.8 lb VHAP/lb solids) and a thinner containing no more than 3.0 percent HAP by weight.
- (b) The owner or operator of the spray paint areas B-1 and B-2 that are complying through the procedures established (a)(1) and are applying coatings using continuous coaters shall demonstrate initial compliance by:
 - (1) Submitting an initial compliance status report, as required by § 63.807(b), stating that compliant coatings, as determined by the VHAP content of the coating in the reservoir and the VHAP content as calculated from records, and compliant thinners are being used; or
 - (2) Submitting an initial compliance status report, as required by § 63.807(b), stating that compliant coatings, as determined by the VHAP content of the coating in the reservoir, are being used; the viscosity of the coating in the reservoir is being monitored; and compliant thinners are being used. The affected source shall also submit data that demonstrate that viscosity is an appropriate parameter for demonstrating compliance.
- (c) The owner or operator of the paint booths in Condition D.1.3, shall submit an initial compliance status report, as required by § 63.807(b), stating that the work practice implementation plan has been developed and procedures have been established for implementing the provisions of the plan.
- (d) The owner or operator of the paint booths that are complying through the procedures established in § 63.804 (d)(2) and are applying coatings using continuous coaters shall demonstrate continuous compliance by following the procedures:
 - (1) Using compliant coatings, as determined by the VHAP content of the coating in the reservoir and the VHAP content as calculated records, using compliant thinners, and submitting a compliance certification with the semiannual report required by § 63.807(c).
 - (2) The compliance certification shall state that compliant coatings have been used each day in the semiannual reporting period, or should otherwise identify the days of noncompliance and the reasons for noncompliance. The spray paint areas B-1 and B-2 are in violation of the standard whenever a noncompliant coating, as determined by records or by a sample of the coating, is used. Use of a noncompliant coating is a separate violation for each day the noncompliant coating is used.
 - (3) The compliance certification shall be signed by a responsible official of the company that owns or operates the spray paint areas B-1 and B-2.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.12 Record Keeping Requirements [326 IAC 14][40 CFR Part 63.806]

- (a) To document compliance with Condition D.1.1(c), the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1(c).
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

- (2) A log of the months of use;
 - (3) The cleanup solvent usage for each month;
 - (4) The total VOC usage for each month; and
 - (5) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with condition D.1.9 and D.1.10, the Permittee shall maintain a copy of the operator-training program, training records, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) The owner or operator of the spray paint areas B-1 and B-2 shall fulfill all record keeping requirements of § 63.10 of subpart A, according to the applicability criteria in § 63.800(d) of this subpart.
- (d) The owner or operator of the spray paint areas B-1 and B-2 subject to the emission limits in Condition D.1.3 of this permit shall maintain records of the following:
 - (1) A certified product data sheet for each finishing material, thinner, contact adhesive, and strippable spray booth coating subject to the emission limits in § 63.802; and
 - (2) The VHAP content, in kg VHAP/kg solids (lb VHAP/lb solids), as applied, of each finishing material and contact adhesive subject to the emission limits in § 63.802; and
 - (3) The VOC content, in kg VOC/kg solids (lb VOC/lb solids), as applied, of each strippable booth coating subject to the emission limits in § 63.802 (b)(3).
- (e) The owner or operator of the spray paint areas B-1 and B-2 shall maintain onsite the work practice implementation plan and all records associated with fulfilling the requirements of that plan, including, but not limited to:
 - (1) Records demonstrating that the operator training program required by § 63.803(b) is in place;
 - (2) Records collected in accordance with the inspection and maintenance plan required by § 63.803(c);
 - (3) Records associated with the cleaning solvent accounting system required by § 63.803(d);
 - (4) Records associated with the limitation on the use of conventional air spray guns showing total finishing material usage and the percentage of finishing materials applied with conventional air spray guns for each semiannual period as required by § 63.803(h)(5).
 - (5) Records associated with the formulation assessment plan required by § 63.803(l); and
 - (6) Copies of documentation such as logs developed to demonstrate that the other provisions of the work practice implementation plan are followed.
- (f) The owner or operator of the spray paint areas B-1 and B-2 subject to the emission limits in D.1.3 and following the compliance provisions of § 63.804(f) (3), and § 63.804(g)(3)(I), shall maintain records of the compliance certifications submitted in accordance with § 63.807(c) for each semiannual period following the compliance date.

- (g) The owner or operator of the spray paint areas B-1 and B-2 shall maintain records of all other information submitted with the compliance status report required by § 63.9(h) and § 63.807(b) and the semiannual reports required by § 63.807(c).
- (h) The owner or operator of the spray paint areas B-1 and B-2 shall maintain all records in accordance with the requirements of § 63.10(b)(1).
- (i) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.13 Reporting Requirements [326 IAC 14] [40 CFR Part 63.807]

- (a) A quarterly summary of the information to document compliance with Condition D.1.1(c), shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.
- (b) The owner or operator of the spray paint areas B-1 and B-2 subject to this subpart shall fulfill all reporting requirements of § 63.7 through § 63.10 of subpart A (General Provisions) according to the applicability criteria in § 63.800(d) of this subpart.
- (c) The owner or operator of the spray paint areas B-1 and B-2 demonstrating compliance in accordance with § 63.804(f) (3) shall submit the compliance status report required by § 63.9(h) of subpart A (General Provisions) no later than 60 days after the compliance date. The report shall include the information required by § 63.804(f) (3) of this subpart and submitted to the address listed in Section C - General Reporting Requirements, of this permit.
- (d) The owner or operator of the spray paint areas B-1 and B-2 demonstrating compliance in accordance with § 63.804(g) (3) shall submit a report covering the previous 6 months of wood furniture manufacturing operations:
 - (1) The first report shall be submitted 30 calendar days after the end of the first 6-month period following the compliance date.
 - (2) Subsequent reports shall be submitted 30 calendar days after the end of each 6-month period following the first report.
 - (3) The semiannual reports shall include the information required by § 63.804(g) (3), a statement of whether the affected source was in compliance or noncompliance, and, if the affected source was in noncompliance, the measures taken to bring the affected source into compliance.
 - (4) The frequency of the reports required by paragraph (c) of this section shall not be reduced from semiannually regardless of the history of the owner's or operator's compliance status.

The report shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit.

SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

EU-03 (Frames), One (1) Spray Paint Booth B-3, equipped with two (2) high volume low pressure (HVLP) spray application for coating metal frames, identified as EU-03 (Frame Shop), with a maximum capacity of four (4) frames per hour, using dry filters as particulate matter overspray control, and exhausting to stack SV-3. (1990)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Volatile Organic Compounds (Miscellaneous Metal Coatings) [326 IAC 8-2-9] [326 IAC 2-2]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) and CP# 039-9230-00157, issued on June 18, 1998, the volatile organic compound (VOC) content of coatings applied to metal frames in the paint booth identified as B-3 shall be limited to:

Coatings	Limit (pounds of VOC/gallon of coating less water delivered to the applicator)
Extreme Performance Coat	3.50

- (b) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) and CP# 039-9230-00157, issued on June 18, 1998, solvent sprayed from the application equipment during clean up or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
- (c) The input VOC to the Spray Paint Booth B-3 and the usage of cleanup solvent for the Spray Paint Booth B-3 (the usage of cleanup solvent may need to take into account any recycling of cleanup rags or reused solvent), in combination with input VOC from Spray Booth B-1, Spray Booth B-2, FRP Booth, the undercoating spray booth, and insignificant activities, shall be limited to less than 156 tons per 12 consecutive month period. This limitation will make 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

D.3.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3 (Process Operations), the paint booth identified as B-3 shall have a PM allowable emissions using the following equation:

$$E = 4.10 P^{0.67}$$

where

E = PM allowable emissions in pounds per hour

P = Process weight rate in tons per hour

D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

D.3.4 Volatile Organic Compounds

Compliance with the VOC content and usage limitations contained in Conditions D.3.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3)(A) and 326 8-1-2 (a) (7) using formulation data supplied by the coating manufacturer. However, IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

SECTION D.5

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

EU-05 (FRP), One (1) FRP Booth (seam work on special orders), identified as EU-05 (Resin Repair Booth), equipped with three (3) high volume low pressure (HVLP) spray and hand lay up application for coating fiberglass touch up and repair operation, with a maximum capacity of 0.12 units per hour, using dry filters for particulate matter overspray control, and exhausting to stack SV-5. (1995)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3 (Process Operations), the FRP Booth, identified as EU-05, shall have a PM allowable emissions using the following equation:

$$E = 4.10 P^{0.67}$$

Where:

E = PM allowable emissions in pounds per hour

P = Process weight rate in tons per hour

D.5.2 Volatile Organic Compound (VOC) [326 IAC 8-1-6] [326 IAC 2-2]

- (a) The FRP Booth, identified as EU-05, is not subject to 326 IAC 8-1-6. However, any change or modification which may increase VOC potential emissions to 25 tons per year from the FRP booth, shall require prior approval from the OAQ to determine applicability requirements of 326 IAC 8, before such change may occur.
- (b) The input VOC to the FRP Booth and the usage of cleanup solvent for the FRP Booth (the usage of cleanup solvent may need to take into account any recycling of cleanup rags or reused solvent), in combination with input VOC from Spray Paint Booths B-1, B-2, and B-3, the undercoating spray booth, and insignificant activities, shall be limited to less than 156 tons per 12 consecutive month period. This limitation will make 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

Compliance Determination Requirements

D.5.3 Testing Requirements

The Permittee is not required to test the FRP Booth, identified as EU-05, by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.5.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.5.4 VOC Emissions

Compliance with Condition D.5.2(b) shall be demonstrated at the end of each month based on the total volatile organic compound usage for the most recent month.

Compliance Monitoring Requirements

D.5.5 Particulate Matter (PM)

The dry filters for particulate matter overspray control shall be properly in place and maintained to ensure integrity and particulate loading of the filters at all times when the paint booths are in operation.

SECTION D.6

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

EU-06 (R&D, Service and Warranty), One (1) spray paint booth (R & D), equipped with one (1) air atomized spray gun for fiberglass mold coating, with a production rate of 0.0031 unit per hour, located at the Research and Development Center. (1996)

- Two (2) spray coating booths, identified as BR-1 and BR-2, equipped with HVLP spray guns, using dry filters for overspray control, and each exhausting at two (2) stacks, identified as SV6-1A and SV6-1B and SV6-2A and SV6-2B, respectively. (1998)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Pursuant to the BACT determination under 326 IAC 8-1-6 (New Facilities, General Reduction Requirements), operation of the two (2) spray coating booths (BR-1 and BR-2) without the use of add-on controls and with the following emission limitation and work practices will satisfy the BACT requirements:

- (a) The total usage of VOC in the two (2) spray coating booths (BR-1 and BR-2) shall not exceed 138.28 tons per twelve (12) consecutive month period.
- (b) The following work practices shall be performed:
 - (1) Cleaning motor home exteriors prior to painting, primer application, and base coat application - motor home exteriors will be hand-wiped with a cleaning solvent prior to the application of the first surface coating.
 - (2) Primer, base coat, and clear coat application - primer, base coats, and clear coat will be applied using high volume low pressure (HVLP) spray equipment.
 - (3) Paint repairs - paint repairs will be done using air atomized spray application to achieve the necessary atomization and blend needed for the repair.

HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

D.6.2 Volatile Organic Compound (VOC)

The spray paint booth, located at the Research and Development Center, is not subject to 326 IAC 8-1-6. However, any change or modification which may increase VOC potential emissions to 25 tons per year from the spray paint booth, located at the Research and Development Center, shall require prior approval from the OAQ to determine applicability requirements of 326 IAC 8, before such change may occur.

D.6.3 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2 (Process Operations), the PM from the spray booths identified as BR-1 and BR-2, and the spray paint booth located at the Research and Development Center shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where

E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.6.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

D.6.5 Volatile Organic Compounds (VOC)

Compliance with the VOC usage limitation contained in Condition D.6.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3)(A) and 326 IAC 8-1-2(a)(7) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.6.6 VOC Emissions

Compliance with Condition D.6.1 shall be demonstrated at the end of each month based on the total volatile organic compound usage for the most recent month.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.6.7 Particulate Matter (PM)

The dry filters for particulate matter overspray control shall be properly in place and maintained to ensure integrity and particulate loading of the filters at all times when the paint booths are in operation.

D.6.8 Training Requirements

(a) The Permittee shall implement an operator training program.

- (1) All operators that perform surface coating operations using spray equipment or booth maintenance shall be trained in the proper set-up and operation of the particulate control system. All existing operating shall be trained within 60 days of the date of permit issuance. All new operators shall be trained upon hiring or transfer.
- (2) Training shall include proper filter alignment, filter inspection and maintenance, and trouble shooting practices. The training program shall be written and retained on site. The training program shall include a description of the methods to be used at the completion of initial and refresher training to demonstrate and document successful completion. Copies of the training program, the list of trained operators and training records shall be maintained on site or available within 1 hour for inspection by IDEM.
- (3) All operators shall be given refresher training annually.

(b) Additional inspection and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.9 Record Keeping Requirements

(a) To document compliance with Conditions D.6.1 and D.6.2, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and VOC emission limits established in Conditions D.6.1 and D.6.2.

- (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and EPA VOC Data Sheets necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

- (2) A log of the month of use;
 - (3) The cleanup solvent usage for each month;
 - (4) The total VOC usage for each month; and
 - (5) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with condition D.6.7 and D.6.8, the Permittee shall maintain a copy of the operator-training program, training records, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.6.10 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.6.1 and D.6.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. This summary report shall include the monthly VOC emitted.

SECTION D.10

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- I) One (1) undercoating booth, identified as EU-08, using an airless spray application system, coating a maximum of 2.5 wood and metal chassis per hour, exhausting to the general ventilation.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.10.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]

The PM from the undercoating booth shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.10.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coatings applied to metal parts or products in the undercoating booth shall be limited to 3.5 pounds of VOC per gallon of coating less water delivered to the applicator, for air dried or forced warm air dried coatings.
- (b) Solvent sprayed from the application equipment during clean up or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
- (c) The input VOC to the undercoating spray booth in combination with input VOC from Spray Booths B-1, B-2, B-3, FRP Booth, and insignificant activities, shall be limited to less than 156 tons per 12 consecutive month period. This limitation will make 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

Compliance Determination Requirements

D.10.3 Volatile Organic Compounds (VOC)

Compliance with the VOC content limitation contained in Condition D.10.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.10.4 Record Keeping Requirements

- (a) To document compliance with Condition D.10.2, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.10.2.

- (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the month of use;
 - (3) The cleanup solvent usage for each month;
 - (4) The total VOC usage for each month; and
 - (5) The weight of VOCs emitted for each compliance period.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Newmar Corporation
Source Address: 355 North Delaware Street, Nappanee, Indiana 46550-0030
Mailing Address: P.O. Box 30, Nappanee, Indiana 46550-0030
Part 70 Permit No.: T039-7571-00157
Facility: Entire Source
Parameter: VOC emissions (tons)
Limit: 138.28 tons/year from BR-1 and BR-2; 70 tons/year from B-2a and B-2b; and
<156 tons/year from Spray Booths B-1, B-2, B-3, FRP Booth, the undercoating
spray booth, and insignificant activities.

This form consists of 2 pages

page 1 of 2

Month: _____

Facility	VOC Limit (ton/year)	VOC Usage this month (tons)	VOC Usage past 11 months (tons)	Total VOC Usage past 12 months (tons)
Fiberglass Coating Operations BR-1 and BR-2	138.28			
Paint Booths B-2a and B-2b	70			
Spray Booths B-1, B-2, and B-3, FRP booth, the undercoating spray booth, and other emissions from insignificant activities	< 156			

This form consists of 2 pages

page 2 of 2

Month: _____

Facility	VOC Limit (ton/year)	VOC Usage this month (tons)	VOC Usage past 11 months (tons)	Total VOC Usage past 12 months (tons)
Fiberglass Coating Operations BR-1 and BR-2	138.28			
Paint Booths B-2a and B-2b	70			
Spray Booths B-1, B-2, and B-3, FRP booth, the undercoating spray booth and other emissions from insignificant activities	< 156			

Month: _____

Facility	VOC Limit (ton/year)	VOC Usage this month (tons)	VOC Usage past 11 months (tons)	Total VOC Usage past 12 months (tons)
Fiberglass Coating Operations BR-1 and BR-2	138.28			
Paint Booths B-2a and B-2b	70			
Spray Booths B-1, B-2, and B-3, FRP booth, the undercoating spray booth and other emissions from insignificant activities	< 156			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document for a Part 70 Significant Source Modification and Significant Permit Modification

Source Name:	Newmar Corporation
Source Location:	355 North Delaware, Nappanee, Indiana 46550
County:	Elkhart
Source Modification No.:	039-14882-00157
Permit Modification No.:	039-15355-00157
SIC Code:	3716, 3792
Permit Reviewer:	Trish Earls/EVP

On January 20, 2002, the Office of Air Quality (OAQ) had a notice published in The Elkhart Truth, Elkhart, Indiana, stating that Newmar Corporation had applied for a Significant Source Modification and Significant Permit Modification for an increase in VOC emissions from the two (2) existing spray coating booths, identified as BR-1 and BR-2, and for the addition of spray booth B-2 to the facility identified as EU-01 with no change in emissions. The notice also stated that OAQ proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On February 6, 2002, Newmar Corporation submitted comments on the proposed permit. The summary of the comments and corresponding responses is as follows:

Comment #1

Newmar Corporation requests that condition D.10.4(a)(2) be changed from "a log of the dates of use" to "a log of the month of use". This is consistent with the monthly records required by D.10.4(a).

Response #1

Since monthly records are necessary to demonstrate compliance with the rolling monthly VOC usage limit in condition D.10.2, paragraph (a)(2) of condition D.10.4 will be revised as requested to be consistent with the required frequency of record keeping.

D.10.4 Record Keeping Requirements

- (a) To document compliance with Condition D.10.2, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.10.2.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the ~~dates~~ **month** of use;
 - (3) The cleanup solvent usage for each month;

- (4) The total VOC usage for each month; and
- (5) The weight of VOCs emitted for each compliance period.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Upon further review, the OAQ has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted).

1. After further review of the applicability of 326 IAC 8-2-9 and the exemption to the rule listed in 326 IAC 8-2-9(b)(4), the limit on vehicles coated in booths BR-1 and BR-2 listed in condition D.6.2 has been removed. Pursuant to 326 IAC 8-2-9(b)(4), the rule does not apply to customized top coating of automobiles and trucks if production is less than thirty-five (35) vehicles per day. The OAQ has determined that motor homes and travel trailers are not considered automobiles or trucks, therefore, this exemption would not apply to the surface coating operation in booths BR-1 and BR-2. However, 326 IAC 8-2-9 does not apply to booths BR-1 and BR-2 because this is essentially a fiberglass coating operation. The only metal that may be coated in these booths is metal trim that is on the fiberglass motor home or travel trailer which would be coated together with the fiberglass. The metal trim does not meet any of the applicability criteria listed in 326 IAC 8-2-9(a), therefore, this rule does not apply.

The OAQ prefers that the Technical Support Document (TSD) reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. The State Rule Applicability section of the TSD, discussing the applicability of 326 IAC 8-2-9, is revised to read as follows:

326 IAC 8-2-9 (Miscellaneous Metal Coating)

This modification is not subject to the requirements of this rule. ~~Pursuant to 326 IAC 8-2-9(b)(4), the rule does not apply to customized top coating of automobiles and trucks if production is less than thirty-five (35) vehicles per day. As stated in the Technical Support Document for the Part 70 permit T039-7571-00157, issued October 18, 1999, the source agreed to limit production in the two (2) spray coating booths (BR-1 and BR-2) to thirty-four (34) vehicles per day. The number of vehicles processed in the two (2) spray coating booths (BR-1 and BR-2) was required to be reported with the quarterly report to document compliance with the previous VOC usage limitation for these booths. This production limit is now being included in a new operating condition, condition D.6.2, in the Part 70 permit. The number of vehicles coated in the two (2) spray coating booths (BR-1 and BR-2) shall not exceed thirty-four (34) vehicles per day. This rule does not apply to booths BR-1 and BR-2 because this is essentially a fiberglass coating operation. The only metal that may be coated in these booths is metal trim that is on the fiberglass motor home or travel trailer which would be coated together with the fiberglass. The metal trim does not meet any of the applicability criteria listed in 326 IAC 8-2-9(a), therefore, the requirements of 326 IAC 8-2-9 do not apply to these coating booths.~~

Condition D.6.2 has been removed from the Part 70 permit and all other conditions have been re-numbered accordingly. Conditions D.6.10 and D.6.11, now re-numbered D.6.9 and D.6.10, has been revised to remove references to condition D.6.2 and paragraph (a)(3) of condition D.6.10, now D.6.9, has been deleted.

~~D.6.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]~~

~~The number of vehicles coated in the two (2) spray coating booths (BR-1 and BR-2) shall not exceed thirty-four (34) vehicles per day. Therefore, the requirements of 326 IAC 8-2-9 do not apply to these coating booths.~~

D.6.109 Record Keeping Requirements

- (a) To document compliance with Conditions D.6.1; **and** D.6.2, ~~and D.6.3~~, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and VOC emission limits established in Conditions D.6.1; **and** D.6.2, ~~and D.6.3~~.
- (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and EPA VOC Data Sheets necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the month of use;
 - ~~(3) The number of vehicles coated in the two (2) spray booths (BR-1 and BR-2) per day;~~
 - ~~(4)~~(3) The cleanup solvent usage for each month;
 - ~~(5)~~(4) The total VOC usage for each month; and
 - ~~(6)~~(5) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with condition D.6.87 and D.6.98, the Permittee shall maintain a copy of the operator-training program, training records, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.6.140 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.6.1; **and** D.6.2, ~~and D.6.3~~ shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. This summary report shall include the monthly VOC emitted ~~and a daily record of the number of recreational vehicles processed.~~

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Source Modification and Permit Modification to a Part 70 Operating Permit

Source Background and Description

Source Name:	Newmar Corporation
Source Location:	355 North Delaware Street, Nappanee, Indiana 46550
County:	Elkhart
SIC Code:	3716, 3792
Operation Permit No.:	T039-7571-00157
Operation Permit Issuance Date:	October 18, 1999
Source Modification No.:	039-14882-00157
Permit Modification No.:	039-15355-00157
Permit Reviewer:	Trish Earls/EVP

The Office of Air Quality (OAQ) has reviewed a modification application from Newmar Corporation relating to the operation of a motor homes and travel trailers manufacturing plant.

History

On September 25, 2001, Newmar Corporation submitted an application to the OAQ requesting to increase the coating throughput to two of their existing surface coating booths, identified as BR-1 and BR-2, at their existing plant. This increase is due to an increase in the portion of recreational vehicles, motor homes, and travel trailers that will require painting of the full body of the vehicle. There is no increased utilization at any other facilities at this source because of this coating usage increase. There is no increase in the amount of recreational vehicles, motor homes, or travel trailers produced. There is only an increase in the portion of these units that require coating in these two (2) booths. There is also a change in the equipment description indicating that each booth exhausts through two (2) stacks. The equipment description for these booths is revised to read as follows:

- f) EU-06 (R&D, Service & Warranty)
 - One (1) spray paint booth (R & D), equipped with one (1) air atomized spray gun for fiberglass mold coating, with a production rate of 0.0031 unit per hour, located at Research and Development Center. (1996)
 - Two (2) spray coating booths, identified as BR-1 and BR-2, equipped with HVLP spray guns, using dry filters for overspray control, and **each** exhausting at two (2) stacks, identified as **SV6-1A and SV6-1B and SV6-2A and SV6-2B, respectively**. ~~These booths have not been installed yet. When these are installed, the proper notification will be submitted to IDEM.~~ (1998)

On January 7, 2002, Newmar Corporation submitted an additional request to include spray booth B-2 in the existing permitted facility identified as EU-01 (Hardwoods). This previously permitted booth was taken out of service prior to issuance of the Part 70 permit and was therefore not included in the Part 70 permit. However, the source is now requesting that this booth be put back into operation and used to coat interior wood components along with the existing booth B-1. The potential emissions of VOC from EU-01 would remain unchanged since there will be no increase in the amount of units coated or in the amount of coating used. As the existing booth B-1 is subject to the requirements of 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating) and the requirements of 40 CFR 63.802, Subpart JJ, National Emission Standards for Wood Furniture Manufacturing Operations, the booth B-2 would now also be subject to the requirements of those rules. The booth B-2 would also be included in the VOC emission limit of less than 156 tons per year, included in condition D.1.1, that was part of a previous PSD minor source wide VOC emission limit. The equipment description for the facility EU-01 is revised as follows:

- a) EU-01 (Hardwoods)
- One (1) Spray Paint Booth B-1, equipped with six (6) high volume low pressure (HVLP) spray guns, **and one (1) Spray Paint Booth B-2, equipped with six (6) HVLP spray guns**, for coating of interior wood components with a maximum capacity of four (4) recreational vehicles per hour, **each** with dry filters for the particulate matter overspray control, and **booth B-1** exhausting to stacks SV1-1 and SV1-2 **and booth B-2 exhausting to stack SV-91**. (1982)
 - One (1) Dip Tank, with a capacity of four (4) units per hour, exhausting to general ventilation. (1982)

Newmar Corporation was issued a Part 70 permit on October 18, 1999.

Existing Approvals

The source was issued a Part 70 Operating Permit (T039-7571-00157) on October 18, 1999. The source has since received the following:

- (a) First Administrative Amendment No.: 039-11533, issued on December 17, 1999;
- (b) First Significant Source Modification No.: 039-11239, issued on December 28, 1999;
- (c) Second Significant Source Modification No.: 039-12223, issued on August 1, 2000;
- (d) Second Administrative Amendment No.: 039-12485, issued September 18, 2000; and
- (e) First Significant Permit Modification No.: 039-12798, issued February 6, 2001.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
SV6-1A	BR-1	27.0	2.83	15,000	ambient
SV6-1B	BR-1	27.0	2.83	15,000	ambient
SV6-2A	BR-2	27.0	2.83	15,000	ambient
SV6-2B	BR-2	27.0	2.83	15,000	ambient

Recommendation

The staff recommends to the Commissioner that the Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on September 25, 2001. Additional information was received on November 28, 2001.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (pages 1 through 3).

Potential To Emit Before Controls (Modification)

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

Pollutant	Potential To Emit (tons/year)
PM	74.55
PM-10	74.55
SO ₂	0.0
VOC	574.49
CO	0.0
NO _x	0.0

HAP's	Potential To Emit (tons/year)
Xylenes	greater than 10
Ethyl Benzene	greater than 10
MEK	greater than 10
Toluene	greater than 10
MIBK	greater than 10
Glycol Ether	less than 10
Lead Compounds	less than 10
Chromium Compounds	less than 10
TOTAL	greater than 25

Justification for Modification

The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM, PM-10, and VOC are each greater than 25 tons per year. Therefore, the Part 70 permit is being modified through a Part 70 Significant Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(f)(2), (f)(4), and (f)(6).

County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	maintenance
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as maintenance for ozone as of November, 1994.

Source Status

Existing Source PSD Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	not reported
PM-10	4.78
SO ₂	not reported
VOC	75.83
CO	not reported
NO _x	not reported

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.
- (b) These emissions are based upon the 2000 Emission Statement for this source.

Potential to Emit After Controls for the Modification

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units for the modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
BR-1 and BR-2	2.24	2.24	0.0	138.28	0.0	0.0	62.57
Total Emissions	2.24	2.24	0.0	138.28	0.0	0.0	62.57
PSD Significant Modification Threshold	250	250	250	250	250	250	NA

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2 and 40 CFR 52.21, the PSD requirements do not apply.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this modification.
- (b) The National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart JJ, (National Emission Standards for Wood Furniture Manufacturing Operations) is applicable to the facility identified as EU-01 which includes paint spray booths B-1 and B-2, because this source is a major source as defined in 40 CFR Part 63.2 and it assembles objects made of solid wood and then applies various stains, sealers, lacquers, adhesives, enamels, and sealants to the wood. These operations meet the wood furniture and wood furniture component definitions in 40 CFR Part 63.801 since they qualify as "any product made of wood" or "any part that is used in the manufacturer of wood furniture", respectively. It does not meet the definition of incidental wood furniture since it uses more than 100 gallons per month of finishing material and adhesives. Further, the source does not qualify as an area source as specified in 40 CFR Part 63.800 (b)(1), (b)(2), or (b)(3). Since the source does not qualify as either an incidental wood furniture manufacturer or area source, the wood furniture and wood furniture component manufacturing and surface coating operations at Newmar Corporation are therefore subject to the requirements of 40 CFR Part 63.808, Subpart JJ "National Emissions Standards for Wood Furniture Manufacturing Operations".

State Rule Applicability - Entire Source

326 IAC 2-2 (PSD)

This source is not subject to the requirements of this rule. Pursuant to Part 70 permit No. T039-7571-00157, the existing source had a source-wide VOC emission limit of less than 250 tons per year making it an existing minor source under PSD. Therefore, VOC emissions from this modification shall be limited to less than 250 tons per year so that the requirements of this rule do not apply.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of VOC in Elkhart County. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

326 IAC 6-4 (Fugitive Dust Emissions)

Pursuant to this rule, the Permittee shall be in violation of 326 IAC 6-4 (Fugitive Dust Emissions) if any of the criteria specified in 326 IAC 6-4-2(1) through (4) are violated. Observations of visible emissions crossing the property line of the source at or near ground level must be made by a qualified representative of IDEM. [326 IAC 6-4-5(c)]

State Rule Applicability - Individual Facilities

326 IAC 2-4.1-1 (New Source Toxics Control)

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any source that constructs or reconstructs a major source of HAPs, which has the potential to emit (PTE) 10 tons per year of any single HAP or 25 tons per year of any combination of HAPs, must control emissions from that source using technologies consistent with the Maximum Achievable Control Technology (MACT). When the two (2) paint spray booths (BR-1 and BR-2) were constructed in 1998, the potential to emit of any single HAP and of any combination of HAPs were each less than 10 and 25 tons per year, respectively, therefore, this rule was not applicable. Also, when these booths were originally permitted in CP-039-8804-00157, issued on March 17, 1998, there were no HAP limits in the construction permit. This modification does not meet the definition of a construction or reconstruction of a major source of HAPs and there is no relaxation of previous HAP emission limits. It is a modification of existing units, which are part of a production process, and is therefore not subject to the requirements of this rule.

326 IAC 6-3-2 (Process Operations)

- (a) Pursuant to T039-7571-00157, issued October 18, 1999, the particulate matter (PM) from each of the paint spray booths (BR-1 and BR-2) shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The dry filters shall be in operation at all times the two (2) paint spray booths (BR-1 and BR-2) are in operation, in order to comply with this limit.

- (b) The particulate matter (PM) from the paint spray booth (B-2) shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The dry filters shall be in operation at all times the one (1) paint spray booth (B-2) is in operation, in order to comply with this limit.

326 IAC 8-2-9 (Miscellaneous Metal Coating)

This modification is not subject to the requirements of this rule. Pursuant to 326 IAC 8-2-9(b)(4), the rule does not apply to customized top coating of automobiles and trucks if production is less than thirty-five (35) vehicles per day. As stated in the Technical Support Document for the Part 70 permit T039-7571-00157, issued October 18, 1999, the source agreed to limit production in the two (2) spray coating booths (BR-1 and BR-2) to thirty-four (34) vehicles per day. The number of vehicles processed in the two (2) spray coating booths (BR-1 and BR-2) was required to be reported with the quarterly report to document compliance with the previous VOC usage limitation for these booths. This production limit is now being included in a new operating condition, condition D.6.2, in the Part 70 permit. The number of vehicles coated in the two (2) spray coating booths (BR-1 and BR-2) shall not exceed thirty-four (34) vehicles per day. Therefore, the requirements of 326 IAC 8-2-9 do not apply to these coating booths.

326 IAC 8-2-12 (Wood Furniture and Cabinet Coating)

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coatings applied to wood furniture and/or wood components in the paint booth identified as B-2 or EU-01 shall utilize dip-and-drain or High Volume Low Pressure (HVLP) spray application at all times.

High Volume Low Pressure (HVLP) spray means technology used to apply coating to a substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

326 IAC 8-1-6 (New Facilities, General Reduction Requirements)

This modification is subject to the provisions of 326 IAC 8-1-6. This rule requires all facilities constructed after January 1, 1980, which have potential VOC emission rates of greater than or equal to 25 tons per year, and which are not otherwise regulated by other provisions of 326 IAC 8, to reduce VOC emissions using Best Available Control Technology (BACT). Potential VOC emissions from the two (2) spray coating booths (BR-1 and BR-2) are now greater than 25 tons per year, therefore, the modification is subject to this rule.

The first step in evaluating potential applicable control technologies involved a review of control technology determinations made for permitted sources in the motor home and travel trailer manufacturing industry. Based on a comprehensive review of USEPA's RACT /BACT /LAER clearinghouse (RBLC), the top five control technology determinations from similar facilities were identified. They are as follows listed in top-down order from the most effective to the least effective in terms of emission reduction potential/lowest emission rate:

- (1) Work practices, test for non-VOC/HAP clean-up solvent, recycling, HVLP, 5.64 pounds VOC per gallon of primer/sealer, 6.29 pounds VOC per gallon of base coat, 4.45 pounds VOC per gallon of top coat, limit of 129 tons per year (includes two non-BACT booths).
- (2) Electrostatic coating system, HVLP, or equivalent methods, work practices, VOC content limits in pounds per gallon.
- (3) Hand wipe cleaning, HVLP, air atomization for repairs, good housekeeping.
- (4) VOC limited to 78.4 tons per year, use of air atomization spray application.
- (5) Hand wipe cleaning, air atomized spray.

Based on the above information, the following observations were made:

The BACT determinations for the top five similar sources did not require add-on controls. Limited emissions at these sources reduced emissions an average of 80.39% over baseline levels with a range of 69.99% to 86.13%. Three similar sources in the top 10 were issued permits in the years 2000 and 2001 by IDEM with 0% emissions reduction over baseline levels. es. Newmar Corporation will reduce emissions by 76% using similar techniques employed by these sources. Furthermore, a search of the EPA RBLC database for SIC code 379x did not turn up any similar sources involving recreational vehicle painting, motor homes, and travel trailers.

Control technologies that could be potentially implemented are identified as follows:

- (1) Solvent/Material Substitution
 - (a) Use of waterborne coatings - Waterborne coatings are sometimes used to reduce VOC emissions from surface coating operations. Paints are reformulated with water replacing some of the volatile organic compounds. The water becomes a carrier solvent in the process, and is evaporated during the drying process. The drying time of waterborne coatings is dependent upon temperature and humidity, with higher humidity necessitating longer drying times. Even with the addition of a drying oven to shorten the drying time, the product cannot be handled as soon as with solvent based coating systems. Also, waterborne coating formulations do not retain their gloss and color as well as the proposed paint systems.

Newmar's recreational vehicles are painted after the unit is assembled. At that point, the coaches contain components made of wood, fiberglass reinforced plastics (FRP), other plastics, tires, rubber tubing, and various other rubber parts. FRP is a "heat sensitive material" as that term is defined by USEPA in its emission guidance document entitled "Control of Volatile Organic Emissions from Existing Stationary Sources - Volume VI: Surface Coating of Miscellaneous Metal Parts and Products." The guidance document specifically points out that "ovens cannot be used" in the transportation industry "because these assembled products include heat sensitive materials (i.e. tires, rubber tubing, plastic parts, etc.)" Because of the longer drying time, the inability to use drying ovens, and lack of gloss retention, the use of waterborne coatings for coating of the exterior of the recreational vehicles at this facility is not a viable option.

- (b) Use of nonphotochemically reactive solvents - The following nonphotochemically reactive solvents were considered as substitutes in Newmar's paint products:

S Methane,
S Ethane,
S 1,1,1-Trichloroethane,
S Methylene chloride,
S Trichlorotrifluoroethane (Freon 113),
S Trichlorofluoromethane (CFC-11),
S Dichlorodifluoromethane (CFC-12),
S Chlorodifluoromethane (FC-22),
S Trifluoromethane (FC-23),
S Dichlorotetrafluoroethane (CFC-114),
S Chloropentafluoroethane (CFC-115),
S Dichlorotrifluoroethane (HCFC-123),
S Tetrafluoroethane (HFC-134a),
S Dichlorofluoroethane (HCFC-141b),
S Chlorodifluoroethane (HCFC-142b) and
S Acetone

Most of these solvents have been associated with other environmental problems, such as stratospheric ozone depletion. The others on this list, with the exception of acetone, are not used in paint formulations. Acetone is a component of the gun cleaner to be used at this facility. Newmar will continue to review acetone substitution in other coating formulations.

Acetone will be used in the gun cleaner to be used at this facility. The use of the other nonphotochemically reactive solvents listed above is not a feasible option at this facility.

- (c) Use of high solids coating systems - Newmar Corporation will use a solvent based coating system on units painted at this facility. This system consists of a high solids clear coat (approximately 4.44 pounds VOC per gallon of coating), a custom color mixed base coat (approximately 6.01 pounds VOC per gallon of coating), and of an etching primer (approximately 6.00 pounds VOC per gallon of coating) to obtain the required adhesion prior to applying the base coat.

Newmar has attempted to use higher solids paints, coatings with a VOC content of 3.5 pounds per gallon of coating, but had problems with adhesion and gloss which resulted in warranty claims. These coatings and the related problems are not acceptable at this facility. Coatings with higher solids content than the system proposed would require the addition of a drying oven operating at temperatures above 195 degrees F to obtain the finish quality and production rate required. As noted above, the units are painted after being assembled. At this point they contain components made of wood, fiberglass reinforced plastics (FRP), other plastics, tires, rubber tubing, and various other rubber parts. These components are heat sensitive, thereby eliminating the practicality of a drying oven operating at these temperatures to accelerate the drying time and produce the "mirror like" finish required.

- (2) Transfer Efficiency - Newmar Corporation will use HVLP spray equipment to apply coatings at this paint facility. HVLP spray equipment has a recognized transfer efficiency of over 65%. For large flat surfaces the transfer efficiency is expected to be at least 80%. The use of electrostatic spray equipment is not a viable option since the surfaces to be coated are primarily fiberglass and therefore do not have the required conductivity to be coated using electrostatic equipment. Paint repairs will be done using air atomized spray application to achieve the necessary atomization and blend needed for the repair.

The exterior of the units are hand-wiped with a cleaning solvent prior to applying the first surface coating. These application methods are considered BACT for this facility.

- (3) Add-on Control Equipment - For add-on controls to be feasible, it is desirable to minimize the exhausted air flow and maximize the VOC concentration in the exhaust gas. At Newmar, the concentrations in the waste streams are relatively low when compared to the total air flow. At such low VOC concentrations, the fuel value of the emissions is negligible. As a result, a higher quantity of fuel must be added from an outside source to operate the equipment. For this reason, end-of-stack devices are a particularly expensive means of VOC control at this facility.

The following add-on controls were evaluated for feasibility at this facility:

- (a) Carbon adsorption
- (b) Incineration
- (c) Chemical scrubber
- (d) Condensation, and
- (e) Biofiltration.

An evaluation of these systems is provided below.

- (a) Carbon Adsorption

Carbon adsorption systems operate by providing a large surface area to which the air pollutant can adhere. Carbon is commonly used as the adsorptive solid. Due to its internal pore structure, activated carbon has significant surface area, giving it a large adsorption capacity.

Adsorption systems are technically feasible and will be evaluated in conjunction with concentrator systems for use in controlling emissions from the surface coating operations at this facility.

(b) Incineration

Three types of incineration systems were evaluated for use at this facility: a catalytic incineration system, a concentrator system with an oxidizer, and a regenerative thermal oxidizer system.

- (A) Catalytic Incineration - The catalytic incineration system operates similarly to a common afterburner, but uses a catalyst to lower the oxidation temperature of the hydrocarbons, thus reducing the fuel requirements. Typically, a common afterburner system will use 20 times more fuel than a catalytic incineration system and, therefore, was not considered further in this evaluation.

A concern with the catalytic incineration system pertains to the amount of fuel required. The fuel value of a highly concentrated waste stream is used to reduce the fuel demand required during incineration. Due to the low concentrations of the waste streams at this facility, the fuel value is insignificant. The fuel requirement for a catalytic incinerator without a concentrator is approximately 10 times higher than with a concentrator. Catalytic incineration systems are technically feasible and will be evaluated further in this analysis for use in controlling emissions from the surface coating application operations at this facility. In addition, catalytic incineration with a concentrator was also considered further for painting processes at this facility.

- (B) Concentrator Treatment Systems - Concentrator systems combine the features of an adsorption system and an incineration system. These systems involve adsorbing the VOCs from a large volume air stream onto a bed of activated carbon or zeolite, and then desorbing the VOCs from the bed with a small volume of hot air. This small concentrated air stream is then incinerated.

One option in concentrator treatment systems uses zeolite in place of carbon. Zeolite, an inorganic compound consisting mainly of SiO_2 , has a large internal pore structure giving it the large surface area necessary for adsorption systems. The zeolite concentrator works similarly to a carbon concentrator.

Carbon and zeolite concentrator treatment systems are technically feasible and will be further evaluated in this analysis for the surface coating processes at this facility. The evaluation will analyze a combined system consisting of a manufacturer-recommended oxidizer coupled with the concentrator.

- (C) Regenerative Thermal Oxidizer Systems - Regenerative thermal oxidizer systems recover up to 95 percent of the heat generated during the oxidation process. An electric heating element, used for start-up heating, is surrounded by a bed of high temperature silica gravel. This gravel, once heated, will maintain combustion temperatures with little additional fuel, thereby reducing the system fuel requirements.

The regenerative thermal oxidizer system will be evaluated further in this analysis for the surface coating processes at this facility.

(c) Chemical Scrubber

A chemical scrubber is an absorption system in which the waste stream is dissolved in a solvent. Water is the most common solvent used; other solvents are used dependent upon the components of the waste stream. Scrubbers are often not a feasible option because waste streams generally contain several components, and thus may require a different solvent for each target chemical. The waste streams in this facility are no exception. Each process emits several different chemicals, eliminating the scrubber from further consideration.

(d) Condensation

Condensation systems refrigerate the waste stream to condense the gases. The condensate is then collected and reused on-site or treated as a waste. This system is highly efficient (95% or greater) for streams with high concentrations of vapors. The concentrations in Newmar's waste streams are relatively low, however, eliminating a condensation system as a viable option for this facility. In addition, the condensate from Newmar's waste streams would contain several chemicals, and would not be suitable for reuse on-site.

(e) Biofiltration

Biofiltration is a relatively new technology in the United States. This system is a land-intensive setup in which contaminated air is fed under an active bed of soil containing microorganisms. As the air rises through the soil, the microorganisms consume and convert the chemicals to carbon dioxide and water. Biofiltration has been used successfully to control odors in Europe. However, there are only a few applications of biofilters for odor control in the United States. There are no known applications of biofiltration for the removal of VOCs from painting of recreational vehicle bodies. In addition, this facility does not have available land to use for the biofilter bed. For these reasons, biofiltration was not evaluated further for use at this facility.

The technically feasible options are carbon adsorption, incineration, and use of HVLP spray guns. A cost analysis was performed to determine the economic feasibility of carbon adsorption and incineration for the VOC emissions from the two (2) spray coating booths (BR-1 and BR-2). The cost analysis is based on potential VOC emissions of 574.49 tons per year.

Various types of add-on controls were considered for control of VOC emissions at this facility. Due to the low concentration of VOC emissions in the waste stream, additional energy in the form of natural gas would be required to maintain the temperature necessary for destruction of the volatile organic compounds. This energy consumption would use a limited natural resource, natural gas, and result in increased emissions of nitrogen oxides (NOx). The worst case add-on control option would generate 0.022 pounds of NOx per ton of VOC controlled. Additional electricity would be required to run these control devices, adding to the energy demands of the generating facility upstream. The worst case add-on control option would require an additional 220.94 million cubic feet (mmcf) of natural gas per year and an additional 2,159,483 kilowatt hours (kwh) of electricity per year.

The tables below show the results of the cost analysis. The cost analysis is based on potential VOC emissions of 574.49 tons per year.

(A) Capital Cost

Option	Base Price	Direct Cost	Indirect Cost	Total
Incineration (RTO)	1,432,410	435,453	444,047	2,311,910
Catalytic Incineration	869,259	264,255	269,470	1,402,984
Zeolite Concentrator with Incineration	1,673,813	508,839	518,882	2,701,534
Carbon Concentrator with Incineration	1,419,388	431,494	440,010	2,290,892

(B) Annual Operating, Maintenance & Recovery Cost

Option	Direct Cost	Indirect Cost	Capital Recovery Cost	Total
Incineration (RTO)	1,027,764	105,868	376,253	1,509,885
Catalytic Incineration	2,579,889	89,133	214,960	2,883,982
Zeolite Concentrator with Incineration	369,817	TBD	439,662	809,479
Carbon Concentrator with Incineration	215,661	TBD	376,789	592,450

(C) Evaluation

Option	Potential Emissions (tons/yr)	Emissions Removed (tons/yr)	Control Efficiency (%)	\$/ton Removed	Total Annual Cost as percentage of Net Profit Before Taxes
Incineration (RTO)	574.49	568.75	99%	2,655	confidential
Catalytic Incineration	574.49	517.04	90%	5,578	confidential
Zeolite Concentrator with Incineration	574.49	517.04	90%	1,566	confidential
Carbon Concentrator with Incineration	574.49	517.04	90%	1,146	confidential

Methodology:

Emissions removed = (limited potential emissions from warehouse) * (control efficiency)

\$/ton removed = total annual cost / emissions removed

The cost breakdown is as follows:

1. Capital Cost
 - a) Base price: purchase price, auxiliary equipment, instruments, controls, taxes and freight.
 - b) Direct installation cost: foundations/supports, erection/handling, electrical, piping, insulation, painting, site preparation and building/facility.

- c) Indirect installation cost: engineering, supervision, construction/filed expenses, construction fee, start up, performance test, model study and contingencies.
2. Annual Cost
- a) Direct operating cost: operating labor (operator, supervisor), labor and material maintenance, operating materials, utilities (electricity, gas).
 - b) Indirect operating cost: overhead, property tax, insurance, administration and capital recovery cost (for 10 years life of the system at 10% interest rate).

The total capital costs and annual costs of RTO and catalytic incineration exceed the capital cost of the building and booths associated with this project. The total capital costs of each of the concentrator systems exceed the capital cost of the building and booths associated with this project. A comparison was made of the anticipated net profit before taxes attributed to this expansion and the total annual cost of each control option. For each control option, the total annual cost was greater than 100% of the net profit before taxes attributed to this expansion. Therefore, the use of add-on controls is determined to be economically infeasible. Because all other options are technically infeasible or economically infeasible, the following has been determined to be BACT for the two (2) spray coating booths (BR-1 and BR-2):

- (a) The total usage of VOC in the two (2) spray coating booths (BR-1 and BR-2) shall not exceed 138.28 tons per year; and
- (b) The following work practices:
 - (1) Cleaning motor home exteriors prior to painting, primer application, and base coat application - motor home exteriors will be hand-wiped with a cleaning solvent prior to the application of the first surface coating.
 - (2) Primer, base coat, and clear coat application - primer, base coats, and clear coat will be applied using high volume low pressure (HVLP) spray equipment.
 - (3) Paint repairs - paint repairs will be done using air atomized spray application to achieve the necessary atomization and blend needed for the repair.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

- 1. The two (2) spray coating booths (BR-1 and BR-2) have applicable compliance monitoring conditions as specified below:

- (a) The Permittee shall implement an operator training program.
 - (1) All operators that perform surface coating operations using spray equipment or booth maintenance shall be trained in the proper set-up and operation of the particulate control system. All existing operating shall be trained within 60 days of the date of permit issuance. All new operators shall be trained upon hiring or transfer.
 - (2) Training shall include proper filter alignment, filter inspection and maintenance, and trouble shooting practices. The training program shall be written and retained on site. The training program shall include a description of the methods to be used at the completion of initial and refresher training to demonstrate and document successful completion. Copies of the training program, the list of trained operators and training records shall be maintained on site or available within 1 hour for inspection by IDEM.
 - (3) All operators shall be given refresher training annually.
- (b) Additional inspection and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

These monitoring conditions are necessary because the dry filters for the two (2) spray coating booths (BR-1 and BR-2) must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70).

- 2. The one (1) spray booth (B-2) has applicable compliance monitoring conditions as specified below:
 - (a) The Permittee shall implement an operator training program.
 - (1) All operators that perform surface coating operations using spray equipment or booth maintenance shall be trained in the proper set-up and operation of the particulate control system. All existing operating shall be trained within 60 days of the date of permit issuance. All new operators shall be trained upon hiring or transfer.
 - (2) Training shall include proper filter alignment, filter inspection and maintenance, and trouble shooting practices. The training program shall be written and retained on site. The training program shall include a description of the methods to be used at the completion of initial and refresher training to demonstrate and document successful completion. Copies of the training program, the list of trained operators and training records shall be maintained on site or available within 1 hour for inspection by IDEM.
 - (3) All operators shall be given refresher training annually.
 - (b) Additional inspection and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.
 - (c) The owner or operator of the spray paint area B-2 shall comply with the Condition D.1.3 provisions by using the following methods:
 - (1) Use compliant finishing materials according to the following criteria:

- (i) Demonstrate that each sealer and topcoat has a VHAP content of no more than 0.8 kg VHAP/kg solids (0.8 lb VHAP/lb solids), as applied, each stain has a VHAP content of no more than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied, and each thinner contains no more than 10.0 percent VHAP by weight;
 - (ii) Demonstrate that each washcoat, base coat, and enamel that is purchased pre-made, that is, it is not formulated onsite by thinning another finishing material, has a VHAP content of no more than 0.8 kg VHAP/kg solids (0.8 lb VHAP/lb solids), as applied, and each thinner contains no more than 10.0 percent VHAP by weight; and
 - (iii) Demonstrate that each wash coat, base coat, and enamel that is formulated onsite is formulated using a finishing material containing no more than 0.8 kg VHAP/kg solids (0.8 lb VHAP/lb solids) and a thinner containing no more than 3.0 percent HAP by weight.
- (d) The owner or operator of the spray paint area B-2 that are complying through the procedures established (a)(1) and are applying coatings using continuous coaters shall demonstrate initial compliance by:
 - (1) Submitting an initial compliance status report, as required by 40 CFR 63.807(b), stating that compliant coatings, as determined by the VHAP content of the coating in the reservoir and the VHAP content as calculated from records, and compliant thinners are being used; or
 - (2) Submitting an initial compliance status report, as required by 40 CFR 63.807(b), stating that compliant coatings, as determined by the VHAP content of the coating in the reservoir, are being used; the viscosity of the coating in the reservoir is being monitored; and compliant thinners are being used. The affected source shall also submit data that demonstrate that viscosity is an appropriate parameter for demonstrating compliance.
- (e) The owner or operator of the paint booths in Condition D.1.3, shall submit an initial compliance status report, as required by 40 CFR 63.807(b), stating that the work practice implementation plan has been developed and procedures have been established for implementing the provisions of the plan.
- (f) The owner or operator of the paint booth that is complying through the procedures established in 40 CFR 63.804 (d)(2) and are applying coatings using continuous coaters shall demonstrate continuous compliance by following the procedures:
 - (1) Using compliant coatings, as determined by the VHAP content of the coating in the reservoir and the VHAP content as calculated records, using compliant thinners, and submitting a compliance certification with the semiannual report required by 40 CFR 63.807(c).
 - (2) The compliance certification shall state that compliant coatings have been used each day in the semiannual reporting period, or should otherwise identify the days of noncompliance and the reasons for noncompliance. The spray paint area B-2 is in violation of the standard whenever a noncompliant coating, as determined by records or by a sample of the coating, is used. Use of a noncompliant coating is a separate violation for each day the noncompliant coating is used.

- (3) The compliance certification shall be signed by a responsible official of the company that owns or operates the spray paint area B-2.

These monitoring conditions are necessary because the dry filters for the one (1) spray coating booth (B-2) must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70) and to ensure compliance with 40 CFR 63.802, Subpart JJ.

Changes Proposed

The changes listed below have been made to the Part 70 Operating Permit (T039-7571-00157). It should also be noted that as of January 1, 2001, the Office of Air Management is now being referred to as the Office of Air Quality. Therefore, all references to the Office of Air Management have been revised to refer to the Office of Air Quality.

1. The revised equipment descriptions have been added to paragraphs (a) and (f) of section A.2. Section A.2, paragraphs (a) and (f) have been revised as follows:
 - a) EU-01 (Hardwoods)
 - One (1) Spray Paint Booth B-1, equipped with six (6) high volume low pressure (HVLP) spray guns, **and one (1) Spray Paint Booth B-2, equipped with six (6) HVLP spray guns**, for coating of interior wood components with a maximum capacity of four (4) recreational vehicles per hour, **each** with dry filters for the particulate matter overspray control, and **booth B-1** exhausting to stacks SV1-1 and SV1-2 **and booth B-2 exhausting to stack SV-91**. (1982)
 - One (1) Dip Tank, with a capacity of four (4) units per hour, exhausting to general ventilation. (1982)
 - f) EU-06 (R&D, Service & Warranty)
 - One (1) spray paint booth (R & D), equipped with one (1) air atomized spray gun for fiberglass mold coating, with a production rate of 0.0031 unit per hour, located at Research and Development Center. (1996)
 - Two (2) spray coating booths, identified as BR-1 and BR-2, equipped with HVLP spray guns, using dry filters for overspray control, and **each** exhausting at two (2) stacks, identified as SV6-1**A** and **SV6-1B** and SV6-2**A** and **SV6-2B**, **respectively**. ~~These booths have not been installed yet. When these are installed, the proper notification will be submitted to IDEM.~~ (1998)

Also, the undercoating spray booth (EU-08) that was previously added to the source as permitted in Significant Source Modification No. 039-11239-00157, issued on December 28, 1999, has also been added to section A.2. The source modification was incorrectly processed as if the Part 70 permit had not yet been issued. Therefore, this equipment was not included in section A.2 of the Part 70 permit. The equipment description for the undercoating spray booth is added as item (l) and reads as follows:

- l) **One (1) undercoating booth, identified as EU-08, using an airless spray application system, coating a maximum of 2.5 wood and metal chassis per hour, exhausting to the general ventilation.**
2. Section D.1 has been revised to include the spray booth B-2. Section D.1 is revised to read as follows:

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

EU-01 (Hardwoods), One (1) Spray Paint Booth B-1, equipped with six (6) high volume low pressure (HVLP) spray guns, **and one (1) Spray Paint Booth B-2, equipped with six (6) HVLP spray guns**, for coating of interior wood components with a maximum capacity of four (4) recreational vehicles per hour, **each** with dry filters for the particulate matter overspray control, and **booth B-1** exhausting to stacks SV1-1 and SV1-2 **and booth B-2 exhausting to stack SV-91**. (1982)

One (1) Dip Tank B-1 with a capacity of four (4) units per hour, exhausting to general ventilation. (1982)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Volatile Organic Compounds (Wood Furniture and Cabinet Coating) [326 IAC 8-2-12] [326 IAC 2-2]

- (a) Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coatings applied to wood furniture and/or wood components in paint areas identified as B-1 **and B-2**, shall utilize one or more of the following application methods:

Airless Spray Application
Electrostatic Spray Application
Heated Airless Spray Application
Brush or Wipe Application
High Volume Low Pressure HVLP

Air-Assisted Airless Spray Application
Electrostatic Bell or Disc Application
Roller Coating
Dip-and-Drain Application
Aerosol Spray Cans

- (b) High volume low pressure spray is an acceptable alternative application of air-assisted airless spray. High volume low pressure (HVLP) spray means technology used to apply coating to a substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.
- (c) The input VOC to the paint areas B-1 **and B-2** and the usage of cleanup solvent for the paint areas B-1 **and B-2** (the usage of cleanup solvent may need to take into account any recycling of cleanup rags or reused solvent), in combination with input VOC from Spray Paint Booth B-3, FRP Booth, and insignificant activities, shall be limited to < 156 tons per 12 consecutive month period. This limitation will prevent the VOC emissions from the entire source to less than 250 tons per year and make 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

D.1.2 General Provisions Relating to HAPs [326 IAC 20-1-1] [40 CFR 63, Subpart A]

The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63 Subpart JJ.

D.1.3 Volatile Hazardous Air Pollutant (VHAP) [326 IAC 14] [40 CFR Part 63.802] [40 CFR Subpart JJ]

Pursuant to 40 CFR 63, Subpart JJ (National Emission Standards for Wood Furniture Manufacturing Operations):

- (a) The volatile organic hazardous air pollutant (VHAP) emissions from wood kitchen cabinet surface coating operations in the paint areas identified as B-1 **and B-2** shall be limited to:

Coatings	Limit (lb. of VHAP / lb. of solid applied)
weighted average VHAP content all coatings	0.8
stains	1.0
wash coats, sealers, topcoats, base coats, and enamels	0.8
thinners used for on-site formulation of washcoats, basecoats, and enamels (maximum % allowable)	3.0
all other thinners (maximum % allowable)	10.0
strippable spray booth material (maximum VOC content, lbs VOC/lb Solids)	0.80
contact adhesive (excluding aerosol adhesive and contact adhesive applied to nonporous substrates)	0.2

Where VHAP is defined as any hazardous air pollutant listed in Table 2 Subpart JJ.

- (b) The wood furniture coating operation is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP), 326 IAC 20-14, (40 CFR 63, Subpart JJ), with a compliance date of upon startup.

D.1.4 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitations), the PM from **each of the spray areas B-1 and B-2** shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.5 Work Practice Standards [326 IAC 14] [40 CFR Part 63.803]

Pursuant 326 IAC 14 & 40 CFR 63, Subpart JJ (National Emission Standards for Wood Furniture Manufacturing Operations):

- (a) The owner or operator of the spray paint areas **B-1 and B-2** subject to this subpart shall prepare and maintain a written work practice implementation plan that defines environmentally desirable work practices for each wood furniture manufacturing operation and addresses each of the work practice standards presented in paragraphs (b) through (l) of this section. The plan shall be developed no more than 60 days after the issuance date of this permit. The written work practice implementation plan shall be available for inspection by the EPA and IDEM upon request. If the EPA and IDEM determines that the work practice implementation plan does not adequately address each of the topics specified in paragraphs (b) through (l) of this section or that the plan does not include sufficient mechanisms for ensuring that the work practice standards are being implemented, the EPA and IDEM may require the affected source to modify the plan. Revisions or modifications to the plan do not require a revision of the source's Title V permit.

- (b) The owner or operator of the spray paint areas **B-1 and B-2** shall train all new and existing personnel, including contract personnel, who are involved in finishing, gluing, cleaning, and washoff operations, use of manufacturing equipment, or implementation of the requirements of this subpart. All new personnel, those hired after the compliance date of the standard, shall be trained upon hiring. All existing personnel, those hired before the compliance date of the standard, shall be trained within six months of the compliance date of the standard. All personnel shall be given refresher training annually. The owner or operator of the spray paint areas **B-1 and B-2** shall maintain a copy of the training program with the work practice implementation plan. The training program shall include, at a minimum, the following:
- (1) A list of all current personnel by name and job description that are required to be trained;
 - (2) An outline of the subjects to be covered in the initial and refresher training for each position or group of personnel;
 - (3) Lesson plans for courses to be given at the initial and the annual refresher training that include, at a minimum, appropriate application techniques, appropriate cleaning and washoff procedures, appropriate equipment setup and adjustment to minimize finishing material usage and overspray, and appropriate management of cleanup wastes; and
 - (4) A description of the methods to be used at the completion of initial or refresher training to demonstrate and document successful completion.
- (c) The owner or operator of the spray paint areas **B-1 and B-2** shall prepare and maintain with the work practice implementation plan a written leak inspection and maintenance plan that specifies:
- (1) A minimum visual inspection frequency of once per month or all equipment used to transfer or apply coatings, adhesives, or organic solvents;
 - (2) An inspection schedule;
 - (3) Methods for documenting the date and results of each inspection and any repairs that were made;
 - (4) The time frame between identifying the leak and making the repair, which adheres, at a minimum, to the following schedule:
 - (i) A first attempt at repair (e.g., tightening of packing glands) shall be made no later than five calendar days after the leak is detected; and
 - (ii) Final repairs shall be made within 15 calendar days after the leak is detected, unless the leaking equipment is to be replaced by a new purchase, in which case repairs shall be completed within three months.
- (d) The owner or operator of the spray paint areas **B-1 and B-2** shall develop an organic solvent accounting form to record:
- (1) The quantity and type of organic solvent used each month for washoff and cleaning, as defined in § 63.801 of this subpart;
 - (2) The number of pieces washed off, and the reason for the washoff; and

- (3) The quantity of spent solvent generated from each washoff and cleaning operation each month, and whether it is recycled onsite or disposed offsite.
- (e) The owner or operator of the spray paint areas **B-1 and B-2** shall not use cleaning or washoff solvents that contain any of the pollutants listed in Table 4 to this subpart, in concentrations subject to MSDS reporting as required by OSHA.
- (f) The owner or operator of the spray paint areas **B-1 and B-2** shall not use compounds containing more than 8.0 percent by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters, unless the spray booth is being refurbished. If the spray booth is being refurbished, that is the spray booth coating or other protective material used to cover the booth is being replaced, the spray paint booths **B-1 and B-2** shall use no more than 1.0 gallon of organic solvent per booth to prepare the surface of the booth prior to applying the booth coating.
- (g) The owner or operator of the spray paint areas **B-1 and B-2** shall use normally closed containers for storing finishing, gluing, cleaning, and washoff materials.
- (h) The owner or operator of the spray paint areas **B-1 and B-2** shall use conventional air spray guns to apply finishing materials only under any of the following circumstances:
 - (1) To apply finishing materials that have a VOC content no greater than 1.0 lb VOC/lb solids, as applied;
 - (2) For touch up and repair under the following conditions:
 - (i) The touch up and repair occurs after completion of the finishing operation; or
 - (ii) The touch up and repair occurs after the application of stain and before the application of any other type of finishing material, and the materials used for touch up and repair are applied from a container that has a volume of no more than 2.0 gallons.
 - (3) When spray is automated, that is, the spray gun is aimed and triggered automatically, not manually;
 - (4) When emissions from the finishing application station are directed to a control device;
 - (5) The conventional air gun is used to apply finishing materials and the cumulative total usage of that finishing material is no more than 5.0 percent of the total gallons of finishing material used during that semiannual period; or
 - (6) The conventional air gun is used to apply stain on a part for which it is technically or economically infeasible to use any other spray application technology. The owner or operator of the spray paint areas **B-1 and B-2** shall demonstrate technical or economic infeasibility by submitting to the EPA and IDEM a videotape, a technical report, or other documentation that supports the facility's claim of technical or economic infeasibility. The following criteria shall be used, either independently or in combination, to support the owner or operator of spray paint area **B-1 or B-2's** claim of technical or economic infeasibility:
 - (i) The production speed is too high or the part shape is too complex for one operator to coat the part and the application station is not large enough to accommodate an additional operator; or

- (ii) The excessively large vertical spray area of the part makes it difficult to avoid sagging or runs in the stain.
- (i) The owner or operator of the spray paint areas **B-1 and B-2** shall pump or drain all organic solvent used for line cleaning into a normally closed container.
- (j) The owner or operator of the spray paint areas **B-1 and B-2** shall collect all organic solvent used to clean spray guns into a normally closed container.
- (k) The owner or operator of the spray paint areas **B-1 and B-2** shall control emissions from washoff operations by:
 - (1) Using normally closed tanks for washoff; and
 - (2) Minimizing dripping by tilting or rotating the part to drain as much solvent as possible.
- (l) The owner or operator of the spray paint areas **B-1 and B-2** shall prepare and maintain with the work practice implementation plan a formulation assessment plan that:
 - (1) Identifies VHAP from the list presented in Table 5 of the 40 CFR 63 Part JJ that are being used in finishing operations by the facility;
 - (2) Establishes a baseline level of usage by the spray paint areas **B-1 and B-2**, for each VHAP identified in paragraph (l)(1) of this section. The baseline usage level shall be the highest annual usage from 1994, 1995, or 1996, for each VHAP identified in paragraph (l)(1) of this section. For formaldehyde, the baseline level of usage shall be based on the amount of free formaldehyde present in the finishing material when it is applied. For styrene, the baseline level of usage shall be an estimate of unreacted styrene, which shall be calculated by multiplying the amount of styrene monomer in the finishing material, when it is applied, by a factor of 0.16. Sources using a control device to reduce emissions may adjust their usage based on the overall control efficiency of the control system, which is determined using the equation in § 63.805 (d) or (e).
 - (3) Tracks the annual usage of each VHAP identified in (l)(1) by the paint areas that ~~is~~ **are** present in amounts subject to MSDS reporting as required by OSHA.
 - (4) If, after November 1998, the annual usage of the VHAP identified in paragraph (l)(1) exceeds its baseline level, then the owner or operator of the spray paint areas **B-1 and B-2** shall provide a written notification to the permitting authority that describes the amount of the increase and explains the reasons for exceedance of the baseline level. The following explanations would relieve the owner or operator from further action, unless the facility is not in compliance with any State regulations or requirements for that VHAP:
 - (i) The exceedance is no more than 15.0 percent above the baseline level;
 - (ii) Usage of the VHAP is below the de minimis level presented in Table 5 of 40 CFR 63 Part JJ subpart for that VHAP (sources using a control device to reduce emissions may adjust their usage based on the overall control efficiency of the control system, which is determined using the procedures in § 63.805 (d) or (e);
 - (iii) The spray paint areas **B-1 and B-2** are in compliance with its State's air toxic regulations or guidelines for the VHAP; or

- (iv) The source of the pollutant is a finishing material with a VOC content of no more than 1.0 kg VOC/kg solids (1.0 lb VOC/lb solids), as applied.
- (5) If none of the above explanations are the reason for the increase, the owner or operator shall confer with the permitting authority to discuss the reason for the increase and whether there are practical and reasonable technology-based solutions for reducing the usage. The evaluation of whether a technology is reasonable and practical shall be based on cost, quality, and marketability of the product, whether the technology is being used successfully by other wood furniture manufacturing operations, or other criteria mutually agreed upon by the permitting authority and owner or operator. If there are no practical and reasonable solutions, the source need take no further action. If there are solutions, the owner or operator shall develop a plan to reduce usage of the pollutant to the extent feasible. The plan shall address the approach to be used to reduce emissions, a timetable for implementing the plan, and a schedule for submitting notification of progress.
- (6) If after November 1998, an affected source uses a VHAP of potential concern for which a baseline level has not been previously established, then the baseline level shall be established as the de minimis level, based on 70 year exposure levels and data provided in the proposed rulemaking pursuant to Section 112(g) of the CAA, for that pollutant. A list of VHAP of potential concern is provided in Table 6 of 40 CFR 63 Part JJ. If usage of the VHAP of potential concern exceeds the de minimis level, then the source shall provide an explanation to the permitting authority that documents the reason for exceedance of the de minimis level. If the explanation is not one of those listed in paragraphs (l)(4)(i) through (l)(4)(iv), the source shall follow the procedures established in (l)(5).

D.1.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

D.1.7 Performance Test Methods [326 IAC 14][40 CFR Part 63.805]

- (a) The EPA Method 311 of Appendix A of part 63 shall be used in conjunction with formulation data to determine the VHAP content of the liquid coating in the spray areas **B-1 and B-2**. Formulation data shall be used to identify VHAP present in the coating. The EPA Method 311 shall then be used to quantify those VHAP identified through formulation data. The EPA Method 311 shall not be used to quantify HAP such as styrene and formaldehyde that are emitted during the cure.
- (b) The EPA Method 24 (40 CFR part 60, Appendix A) shall be used to determine the solids content by weight and the density of coatings in the spray areas **B-1 and B-2**. If it is demonstrated to the satisfaction of the EPA and IDEM that a coating does not release VOC or HAP byproducts during the cure, for example, all VOC and HAP present in the coating is solvent, then batch formulation information shall be accepted.
- (c) The owner or operator of the spray areas **B-1 and B-2** may request approval from the EPA and IDEM to use an alternative method for determining the VHAP content of the coating.

- (d) In the event of any inconsistency between the EPA Method 24 or Method 311 test data and the spray area B-1 **or the spray area B-2** formulation data, that is, if the EPA Method 24/311 value is higher, the EPA Method 24/311 test shall govern unless after consultation, a regulated source could demonstrate to the satisfaction of the enforcement agency that the formulation data were correct. Sampling procedures shall follow the guidelines presented in "Standard Procedures for Collection of Coating and Ink Samples for VOC Content Analysis by Reference Method 24 and Reference Method 24A" EPA-340/1-91-010. (Docket No. A-93-10, Item No. IV-A-1).

D.1.8 VOC Emissions

Compliance with Condition D.1.1 shall be demonstrated at the end of each month based on the total volatile organic compound usage for the most recent twelve (12) month period.

Compliance Monitoring Requirements

D.1.9 Particulate Matter (PM)

The dry filters for particulate matter overspray control shall be properly in place and maintained to ensure integrity and particulate loading of the filters at all times when the paint booths are in operation.

D.1.10 Training Requirements

- (a) The Permittee shall implement an operator training program.
- (1) All operators that perform surface coating operations using spray equipment or booth maintenance shall be trained in the proper set-up and operation of the particulate control system. All existing operating shall be trained within 60 days of the date of permit issuance. All new operators shall be trained upon hiring or transfer.
- (2) Training shall include proper filter alignment, filter inspection and maintenance, and trouble shooting practices. The training program shall be written and retained on site. The training program shall include a description of the methods to be used at the completion of initial and refresher training to demonstrate and document successful completion. Copies of the training program, the list of trained operators and training records shall be maintained on site or available within 1 hour for inspection by IDEM.
- (3) All operators shall be given refresher training annually.
- (b) Additional inspection and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

D.1.11 Compliance Procedures and Monitoring Requirements [326 IAC 14] [40 CFR Part 63.804]

- (a) The owner or operator of the spray paint areas B-1 **and B-2** shall comply with the Condition D.1.3 provisions by using the following methods:

Use compliant finishing materials according to the following criteria:

- (i) Demonstrate that each sealer and topcoat has a VHAP content of no more than 0.8 kg VHAP/kg solids (0.8 lb VHAP/lb solids), as applied, each stain has a VHAP content of no more than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied, and each thinner contains no more than 10.0 percent VHAP by weight;

- (ii) Demonstrate that each washcoat, base coat, and enamel that is purchased pre-made, that is, it is not formulated onsite by thinning another finishing material, has a VHAP content of no more than 0.8 kg VHAP/kg solids (0.8 lb VHAP/lb solids), as applied, and each thinner contains no more than 10.0 percent VHAP by weight; and
 - (iii) Demonstrate that each wash coat, base coat, and enamel that is formulated onsite is formulated using a finishing material containing no more than 0.8 kg VHAP/kg solids (0.8 lb VHAP/lb solids) and a thinner containing no more than 3.0 percent HAP by weight.
- (b) The owner or operator of the spray paint areas **B-1 and B-2** that are complying through the procedures established (a)(1) and are applying coatings using continuous coaters shall demonstrate initial compliance by:
 - (1) Submitting an initial compliance status report, as required by § 63.807(b), stating that compliant coatings, as determined by the VHAP content of the coating in the reservoir and the VHAP content as calculated from records, and compliant thinners are being used; or
 - (2) Submitting an initial compliance status report, as required by § 63.807(b), stating that compliant coatings, as determined by the VHAP content of the coating in the reservoir, are being used; the viscosity of the coating in the reservoir is being monitored; and compliant thinners are being used. The affected source shall also submit data that demonstrate that viscosity is an appropriate parameter for demonstrating compliance.
- (c) The owner or operator of the paint booths in Condition D.1.3, shall submit an initial compliance status report, as required by § 63.807(b), stating that the work practice implementation plan has been developed and procedures have been established for implementing the provisions of the plan.
- (d) The owner or operator of the paint booths that ~~is~~ **are** complying through the procedures established in § 63.804 (d)(2) and are applying coatings using continuous coaters shall demonstrate continuous compliance by following the procedures:
 - (1) Using compliant coatings, as determined by the VHAP content of the coating in the reservoir and the VHAP content as calculated records, using compliant thinners, and submitting a compliance certification with the semiannual report required by § 63.807(c).
 - (2) The compliance certification shall state that compliant coatings have been used each day in the semiannual reporting period, or should otherwise identify the days of noncompliance and the reasons for noncompliance. The spray paint areas **B-1 and B-2** ~~is~~ **are** in violation of the standard whenever a noncompliant coating, as determined by records or by a sample of the coating, is used. Use of a noncompliant coating is a separate violation for each day the noncompliant coating is used.
 - (3) The compliance certification shall be signed by a responsible official of the company that owns or operates the spray paint areas **B-1 and B-2**.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.12 Record Keeping Requirements [326 IAC 14][40 CFR Part 63.806]

- (a) To document compliance with Condition D.1.1(c), the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1(c).
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the months of use;
 - (3) The cleanup solvent usage for each month;
 - (4) The total VOC usage for each month; and
 - (5) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with condition D.1.9 and D.1.10, the Permittee shall maintain a copy of the operator-training program, training records, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) The owner or operator of the spray paint areas **B-1 and B-2** shall fulfill all record keeping requirements of § 63.10 of subpart A, according to the applicability criteria in § 63.800(d) of this subpart.
- (d) The owner or operator of the spray paint areas **B-1 and B-2** subject to the emission limits in Condition D.1.3 of this permit shall maintain records of the following:
 - (1) A certified product data sheet for each finishing material, thinner, contact adhesive, and strippable spray booth coating subject to the emission limits in § 63.802; and
 - (2) The VHAP content, in kg VHAP/kg solids (lb VHAP/lb solids), as applied, of each finishing material and contact adhesive subject to the emission limits in § 63.802; and
 - (3) The VOC content, in kg VOC/kg solids (lb VOC/lb solids), as applied, of each strippable booth coating subject to the emission limits in § 63.802 (b)(3).
- (e) The owner or operator of the spray paint areas **B-1 and B-2** shall maintain onsite the work practice implementation plan and all records associated with fulfilling the requirements of that plan, including, but not limited to:
 - (1) Records demonstrating that the operator training program required by § 63.803(b) is in place;
 - (2) Records collected in accordance with the inspection and maintenance plan required by § 63.803(c);
 - (3) Records associated with the cleaning solvent accounting system required by § 63.803(d);
 - (4) Records associated with the limitation on the use of conventional air spray guns showing total finishing material usage and the percentage of finishing materials applied with conventional air spray guns for each semiannual period as required by § 63.803(h)(5).

- (5) Records associated with the formulation assessment plan required by § 63.803(l);
and
- (6) Copies of documentation such as logs developed to demonstrate that the other provisions of the work practice implementation plan are followed.
- (f) The owner or operator of the spray paint areas **B-1 and B-2** subject to the emission limits in D.1.3 and following the compliance provisions of § 63.804(f) (3), and § 63.804(g)(3)(I), shall maintain records of the compliance certifications submitted in accordance with § 63.807(c) for each semiannual period following the compliance date.
- (g) The owner or operator of the spray paint areas **B-1 and B-2** shall maintain records of all other information submitted with the compliance status report required by § 63.9(h) and § 63.807(b) and the semiannual reports required by § 63.807(c).
- (h) The owner or operator of the spray paint areas **B-1 and B-2** shall maintain all records in accordance with the requirements of § 63.10(b)(1).
- (i) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.13 Reporting Requirements [326 IAC 14] [40 CFR Part 63.807]

- (a) A quarterly summary of the information to document compliance with Condition D.1.1(c), shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.
- (b) The owner or operator of the spray paint areas **B-1 and B-2** subject to this subpart shall fulfill all reporting requirements of § 63.7 through § 63.10 of subpart A (General Provisions) according to the applicability criteria in § 63.800(d) of this subpart.
- (c) The owner or operator of the spray paint areas **B-1 and B-2** demonstrating compliance in accordance with § 63.804(f) (3) shall submit the compliance status report required by § 63.9(h) of subpart A (General Provisions) no later than 60 days after the compliance date. The report shall include the information required by § 63.804(f) (3) of this subpart and submitted to the address listed in Section C - General Reporting Requirements, of this permit.
- (d) The owner or operator of the spray paint areas **B-1 and B-2** demonstrating compliance in accordance with § 63.804(g) (3) shall submit a report covering the previous 6 months of wood furniture manufacturing operations:
 - (1) The first report shall be submitted 30 calendar days after the end of the first 6-month period following the compliance date.
 - (2) Subsequent reports shall be submitted 30 calendar days after the end of each 6-month period following the first report.
 - (3) The semiannual reports shall include the information required by § 63.804(g) (3), a statement of whether the affected source was in compliance or noncompliance, and, if the affected source was in noncompliance, the measures taken to bring the affected source into compliance.
 - (4) The frequency of the reports required by paragraph (c) of this section shall not be reduced from semiannually regardless of the history of the owner's or operator's compliance status.

The report shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit.

3. Condition D.6.1 has been revised to include the BACT requirements pursuant to 326 IAC 8-1-6 which now apply to the two (2) spray coating booths (BR-1 and BR-2). The condition reads as follows:

D.6.1 BACT Minor Limit Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

~~The VOC input to the fiberglass coating operations performed by the two (2) spray coating booths, identified as BR-1 and BR-2, shall be limited to two (2) tons per calendar month (twenty-four (24) tons of VOC per year). Therefore, the Best Available control Technology (BACT) requirements of 326 IAC 8-1-6 will not apply. Any change or modification which may alter the fiberglass coating operations such that allowable VOC emissions will increase to 25 tons per year or greater, shall obtain a permit modification pursuant to 326 IAC 8-1-6 before such change may occur.~~

Pursuant to the BACT determination under 326 IAC 8-1-6 (New Facilities, General Reduction Requirements), operation of the two (2) spray coating booths (BR-1 and BR-2) without the use of add-on controls and with the following emission limitation and work practices will satisfy the BACT requirements:

- (a) **The total usage of VOC in the two (2) spray coating booths (BR-1 and BR-2) shall not exceed 138.28 tons per twelve (12) consecutive month period.**
- (b) **The following work practices shall be performed:**
 - (1) **Cleaning motor home exteriors prior to painting, primer application, and base coat application - motor home exteriors will be hand-wiped with a cleaning solvent prior to the application of the first surface coating.**
 - (2) **Primer, base coat, and clear coat application - primer, base coats, and clear coat will be applied using high volume low pressure (HVLP) spray equipment.**
 - (3) **Paint repairs - paint repairs will be done using air atomized spray application to achieve the necessary atomization and blend needed for the repair.**

HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

4. A new condition has been added to the Part 70 operating permit to limit the number of vehicles coated in the two (2) paint spray booths (BR-1 and BR-2) to thirty-four (34) vehicles per day so that the requirements of 326 IAC 8-2-9 do not apply. The condition, numbered as D.6.2, reads as follows:

D.6.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

~~The number of vehicles coated in the two (2) spray coating booths (BR-1 and BR-2) shall not exceed thirty-four (34) vehicles per day. Therefore, the requirements of 326 IAC 8-2-9 do not apply to these coating booths.~~

The subsequent conditions in section D.6 have been re-numbered accordingly.

Condition D.6.10, now re-numbered as D.6.11, has been revised to include reference to the new condition D.6.2 and reads as follows:

D.6.10 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.6.1, ~~and~~ D.6.2, **and D.6.3** shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. This summary report shall include the monthly VOC emitted and a daily record of the number of recreational vehicles processed.

5. Condition D.6.9, Record Keeping, now re-numbered as D.6.10, has been revised to include a requirement to keep records of the number of vehicles coated in the two (2) spray booths (BR-1 and BR-2) and to remove reference to condition C.1 since there are no VOC usage limitations in condition C.1 of this permit. It has also been revised to require the month of use to be recorded instead of the dates of use since the limit is based on monthly usage. The condition is revised to read as follows:

D.6.10 Record Keeping Requirements

- (a) To document compliance with Conditions ~~C.1~~, D.6.1, ~~and~~ D.6.2, **and D.6.3**, the Permittee shall maintain records in accordance with (1) through ~~(5)~~**(6)** below. Records maintained for (1) through ~~(5)~~**(6)** shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and VOC emission limits established in Conditions D.6.1, ~~and~~ D.6.2, **and D.6.3**.
- (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and EPA VOC Data Sheets necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
- (2) A log of the ~~dates~~ **month** of use;
- (3) The number of vehicles coated in the two (2) spray booths (BR-1 and BR-2) per day;**
- ~~(3)~~**(4)** The cleanup solvent usage for each month;
- ~~(4)~~**(5)** The total VOC usage for each month; and
- ~~(5)~~**(6)** The weight of VOCs emitted for each compliance period.
- (b) To document compliance with condition D.6.~~78~~ and D.6.~~89~~, the Permittee shall maintain a copy of the operator-training program, training records, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.
6. The existing report form for the entire source VOC emissions has been revised to include the VOC usage limitation for the two (2) spray coating booths pursuant to 326 IAC 8-1-6 (BACT). The revised form is shown on the last two pages of this TSD. Since the source wide limited VOC emissions will now exceed 250 tons per year, this has been removed from the report form. Also, the source status in section A.1 has been revised to state that this is a major source under PSD and the following conditions have been revised to remove any reference to the source wide VOC emissions being less than 250 tons per year. Additionally, since the undercoating spray booth should have been also included in the previous source wide PSD minor VOC emission limit, it will be added to the list of emission units included in the limit.

D.1.1 Volatile Organic Compounds (Wood Furniture and Cabinet Coating) [326 IAC 8-2-12] [326 IAC 2-2]

- (a) Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coatings applied to wood furniture and/or wood components in paint areas identified as B-1 and B-2, shall utilize one or more of the following application methods:

Airless Spray Application	Air-Assisted Airless Spray Application
Electrostatic Spray Application	Electrostatic Bell or Disc Application
Heated Airless Spray Application	Roller Coating
Brush or Wipe Application	Dip-and-Drain Application
High Volume Low Pressure HVLP	Aerosol Spray Cans

- (b) High volume low pressure spray is an acceptable alternative application of air-assisted airless spray. High volume low pressure (HVLP) spray means technology used to apply coating to a substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.
- (c) The input VOC to the paint areas B-1 and B-2 and the usage of cleanup solvent for the paint areas B-1 and B-2 (the usage of cleanup solvent may need to take into account any recycling of cleanup rags or reused solvent), in combination with input VOC from Spray Paint Booth B-3, FRP Booth, **the undercoating spray booth**, and insignificant activities, shall be limited to **≤ less than 156 tons per 12 consecutive month period**. This limitation will ~~prevent the VOC emissions from the entire source to less than 250 tons per year and~~ make 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

D.3.1 Volatile Organic Compounds (Miscellaneous Metal Coatings) [326 IAC 8-2-9] [326 IAC 2-2]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) and CP# 039-9230-00157, issued on June 18, 1998, the volatile organic compound (VOC) content of coatings applied to metal frames in the paint booth identified as B-3 shall be limited to:

Coatings	Limit (pounds of VOC/gallon of coating less water delivered to the applicator)
Extreme Performance Coat	3.50

- (b) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) and CP# 039-9230-00157, issued on June 18, 1998, solvent sprayed from the application equipment during clean up or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
- (c) The input VOC to the Spray Paint Booth B-3 and the usage of cleanup solvent for the Spray Paint Booth B-3 (the usage of cleanup solvent may need to take into account any recycling of cleanup rags or reused solvent), in combination with input VOC from Spray Booth B-1, **Spray Booth B-2**, FRP Booth, **the undercoating spray booth**, and insignificant activities, shall be limited to **≤ less than 156 tons per 12 consecutive month period**. This limitation will ~~prevent the VOC emissions from the entire source to less than 250 tons per year and~~ make 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

D.5.2 Volatile Organic Compound (VOC) [326 IAC 8-1-6] [326 IAC 2-2]

- (a) The FRP Booth, identified as EU-05, is not subject to 326 IAC 8-1-6. However, any change or modification which may increase VOC potential emissions to 25 tons per year from the FRP booth, shall require prior approval from the OAQ to determine applicability requirements of 326 IAC 8, before such change may occur.

- (b) The input VOC to the FRP Booth and the usage of cleanup solvent for the FRP Booth (the usage of cleanup solvent may need to take into account any recycling of cleanup rags or reused solvent), in combination with input VOC from Spray Paint Booths B-1, **B-2**, and B-3, **the undercoating spray booth**, and insignificant activities, shall be limited to **≤ less than 156 tons per 12 consecutive month period**. This limitation will ~~prevent the VOC emissions from the entire source to less than 250 tons per year~~ and make 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.
7. A new section D.10 has been added to include the operation conditions for the one (1) undercoating spray booth as permitted in Significant Source Modification No. 039-11239-00157, issued on December 28, 1999.

Conclusion

The operation of this motor homes and travel trailers manufacturing plant shall be subject to the conditions of the attached proposed Significant Source Modification No. 039-14882-00157.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

OFFICE OF AIR MANAGEMENT QUALITY

COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Newmar Corporation
Source Address: 355 North Delaware Street, Nappanee, Indiana 46550-0030
Mailing Address: P.O. Box 30, Nappanee, Indiana 46550-0030
Part 70 Permit No.: T039-7571-00157
Facility: Entire Source
Parameter: VOC emissions (tons)
Limit: ~~<250 tons per year~~ **138.28 tons/year from BR-1 and BR-2; 70 tons/year from B-2a and B-2b; and <156 tons/year from Spray Booths B-1, B-2, B-3, FRP Booth, the undercoating spray booth, and insignificant activities.**

This form consists of 2 pages

page 1 of 2

Month: _____

Facility	VOC Limit (ton/year)	VOC Usage this month (tons)	VOC Usage past 11 months (tons)	Total VOC Usage past 12 months (tons)
Fiberglass Coating Operations BR-1 and BR-2	24 (2 tons per calendar month) 138.28			
Paint Booths B-2a and B-2b	70			
Spray Booths B-1, B-2 , and B-3, FRP booth, the undercoating spray booth , and other emissions from insignificant activities	< 156			
Total	<250	-	-	

This form consists of 2 pages

page 2 of 2

Month: _____

Facility	VOC Limit (ton/year)	VOC Usage this month (tons)	VOC Usage past 11 months (tons)	Total VOC Usage past 12 months (tons)
Fiberglass Coating Operations BR-1 and BR-2	24 (2 tons per calendar month) 138.28			
Paint Booths B-2a and B-2b	70			
Spray Booths B-1, B-2, and B-3, FRP booth, the undercoating spray booth, and other emissions from insignificant activities	< 156			
Total	< 250	-	-	

Month: _____

Facility	VOC Limit (ton/year)	VOC Usage this month (tons)	VOC Usage past 11 months (tons)	Total VOC Usage past 12 months (tons)
Fiberglass Coating Operations BR-1 and BR-2	24 (2 tons per calendar month) 138.28			
Paint Booths B-2a and B-2b	70			
Spray Booths B-1, B-2, and B-3, FRP booth, the undercoating spray booth, and other emissions from insignificant activities	< 156			
Total	< 250	-	-	

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

**Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations**

Page 1 of 3 TSD App A

Company Name: Newmar Corporation
Address City IN Zip: 355 North Delaware, Nappanee, Indiana 46550
Significant Source Mod. No.: 039-14882
Pit ID: 039-00157
Reviewer: Trish Earls/EVP
Date: September 25, 2001

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	Lb VOC/gal solids	Transfer Efficiency
Booths BR-1 and BR-2																
Base Coat	7.5	87.69%	0.0%	87.69%	0.0%	23.29%	16.04900	0.750	6.58	6.58	79.16	1899.90	346.73	17.04	28.24	65%
HM Gun Cleaner	6.7	100.00%	0.0%	100.00%	0.0%	0.00%	2.00000	0.750	6.74	6.74	10.11	242.64	44.28	0.00	ERR	65%
Ultraclean	6.2	100.00%	0.0%	100.00%	0.0%	0.00%	0.09600	0.750	6.21	6.21	0.45	10.73	1.96	0.00	ERR	65%
London Clearcoat	8.1	53.05%	0.0%	53.05%	0.0%	46.95%	12.09400	0.750	4.28	4.28	38.78	930.81	169.87	52.62	9.11	65%
Primer	7.8	45.43%	0.0%	45.43%	0.0%	26.00%	1.00000	0.750	3.54	3.54	2.66	63.78	11.64	4.89	13.63	65%

Potential Emissions **Add worst case coating to all solvents**

131.16	3147.87	574.49	74.55
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Control Efficiency:		Controlled VOC lbs per Hour	Controlled VOC lbs per Day	Controlled VOC tons per Year	Controlled PM tons/yr
VOC	PM				
0.00%	97.00%	131.16	3147.87	574.49	2.24

Emissions After Control

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Appendix A: HAP Emission Calculations (Page 1 of 2)

Company Name: Newmar Corporation
Address City IN Zip: 355 North Delaware, Nappanee, Indiana 46550
Significant Source Mod. No.: 039-14882
Plt ID: 039-00157
Reviewer: Trish Earls/EVP
Date: September 25, 2001

[illegible]

Appendix A: HAP Emission Calculations (Page 2 of 2)

Company Name: Newmar Corporation
Address City IN Zip: 355 North Delaware, Nappanee, Indiana 46550
Significant Source Mod. No.: 039-14882
Plt ID: 039-00157
Reviewer: Trish Earls/EVP
Date: September 25, 2001

Material	Density (Lb/Gal)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Xylene Emissions (ton/yr)	Ethyl Benzene Emissions (ton/yr)	MEK Emissions (ton/yr)	Toluene Emissions (ton/yr)	MIBK Emissions (ton/yr)	2-Butoxyethanol (Glycol Ether) Emissions (ton/yr)	Lead Compounds Emissions (ton/yr)	Chromium Compounds Emissions (ton/yr)
Booths BR-1 and BR-2											
Base Coat	7.5	16.04900	0.750	149.48	27.28	0.00	10.68	0.39	0.00	0.08	0.08
HM Gun Cleaner	6.7	2.00000	0.750	0.00	0.00	0.00	15.96	4.40	0.00	0.00	0.00
Ultraclean	6.2	0.09600	0.750	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
London Clearcoat	8.1	12.09400	0.750	0.00	0.00	20.33	1.17	20.33	0.00	0.00	0.00
Primer	7.8	1.00000	0.750	1.02	0.00	0.00	0.64	6.41	1.67	0.00	0.00
				150.51	27.28	20.33	28.44	31.53	1.67	0.08	0.08

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs * Material Usage Limitation

259.93